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DIAGNOSTIC AND STATISTICAL  
MANUAL OF  
MENTAL DISORDERS

FIFTH EDITION

**DSM-5<sup>TM</sup>**

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# **American Psychiatric Association**

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MANUAL OF  
MENTAL DISORDERS,  
FIFTH EDITION  
DSM-5™

New School Library



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# Autism Spectrum Disorder

## Autism Spectrum Disorder

### Diagnostic Criteria

**299.00 (F84.0)**

- A.** Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history (examples are illustrative, not exhaustive; see text):
1. Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.
  2. Deficits in nonverbal communicative behaviors used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication.
  3. Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.

*Specify current severity:*

**Severity is based on social communication impairments and restricted, repetitive patterns of behavior** (see Table 2).

- B.** Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following, currently or by history (examples are illustrative, not exhaustive; see text):
1. Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases).
  2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat same food every day).
  3. Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests).
  4. Hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).

*Specify current severity:*

**Severity is based on social communication impairments and restricted, repetitive patterns of behavior** (see Table 2).

- C.** Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life).
- D.** Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.

E. These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay. Intellectual disability and autism spectrum disorder frequently co-occur; to make comorbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.

**Note:** Individuals with a well-established DSM-IV diagnosis of autistic disorder, Asperger's disorder, or pervasive developmental disorder not otherwise specified should be given the diagnosis of autism spectrum disorder. Individuals who have marked deficits in social communication, but whose symptoms do not otherwise meet criteria for autism spectrum disorder, should be evaluated for social (pragmatic) communication disorder.

*Specify if:*

**With or without accompanying intellectual impairment**

**With or without accompanying language impairment**

**Associated with a known medical or genetic condition or environmental factor** (Coding note: Use additional code to identify the associated medical or genetic condition.)

**Associated with another neurodevelopmental, mental, or behavioral disorder** (Coding note: Use additional code[s] to identify the associated neurodevelopmental, mental, or behavioral disorder[s].)

**With catatonia** (refer to the criteria for catatonia associated with another mental disorder, pp. 119–120, for definition) (Coding note: Use additional code 293.89 [F06.1] catatonia associated with autism spectrum disorder to indicate the presence of the comorbid catatonia.)

## Recording Procedures

For autism spectrum disorder that is associated with a known medical or genetic condition or environmental factor, or with another neurodevelopmental, mental, or behavioral disorder, record autism spectrum disorder associated with (name of condition, disorder, or factor) (e.g., autism spectrum disorder associated with Rett syndrome). Severity should be recorded as level of support needed for each of the two psychopathological domains in Table 2 (e.g., “requiring very substantial support for deficits in social communication and requiring substantial support for restricted, repetitive behaviors”). Specification of “with accompanying intellectual impairment” or “without accompanying intellectual impairment” should be recorded next. Language impairment specification should be recorded thereafter. If there is accompanying language impairment, the current level of verbal functioning should be recorded (e.g., “with accompanying language impairment—no intelligible speech” or “with accompanying language impairment—phrase speech”). If catatonia is present, record separately “catatonia associated with autism spectrum disorder.”

## Specifiers

The severity specifiers (see Table 2) may be used to describe succinctly the current symptomatology (which might fall below level 1), with the recognition that severity may vary by context and fluctuate over time. Severity of social communication difficulties and restricted, repetitive behaviors should be separately rated. The descriptive severity categories should not be used to determine eligibility for and provision of services; these can only be developed at an individual level and through discussion of personal priorities and targets.

Regarding the specifier “with or without accompanying intellectual impairment,” understanding the (often uneven) intellectual profile of a child or adult with autism spectrum disorder is necessary for interpreting diagnostic features. Separate estimates of verbal and nonverbal skill are necessary (e.g., using untimed nonverbal tests to assess potential strengths in individuals with limited language).



**TABLE 2** Severity levels for autism spectrum disorder

Severity level	Social communication	Restricted, repetitive behaviors
Level 3 "Requiring very substantial support"	Severe deficits in verbal and nonverbal social communication skills cause severe impairments in functioning, very limited initiation of social interactions, and minimal response to social overtures from others. For example, a person with few words of intelligible speech who rarely initiates interaction and, when he or she does, makes unusual approaches to meet needs only and responds to only very direct social approaches.	Inflexibility of behavior, extreme difficulty coping with change, or other restricted/repetitive behaviors markedly interfere with functioning in all spheres. Great distress/difficulty changing focus or action.
Level 2 "Requiring substantial support"	Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions; and reduced or abnormal responses to social overtures from others. For example, a person who speaks simple sentences, whose interaction is limited to narrow special interests, and who has markedly odd nonverbal communication.	Inflexibility of behavior, difficulty coping with change, or other restricted/repetitive behaviors appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts. Distress and/or difficulty changing focus or action.
Level 1 "Requiring support"	Without supports in place, deficits in social communication cause noticeable impairments. Difficulty initiating social interactions, and clear examples of atypical or unsuccessful responses to social overtures of others. May appear to have decreased interest in social interactions. For example, a person who is able to speak in full sentences and engages in communication but whose to-and-fro conversation with others fails, and whose attempts to make friends are odd and typically unsuccessful.	Inflexibility of behavior causes significant interference with functioning in one or more contexts. Difficulty switching between activities. Problems of organization and planning hamper independence.

To use the specifier “with or without accompanying language impairment,” the current level of verbal functioning should be assessed and described. Examples of the specific descriptions for “with accompanying language impairment” might include no intelligible speech (nonverbal), single words only, or phrase speech. Language level in individuals “without accompanying language impairment” might be further described by speaks in full sentences or has fluent speech. Since receptive language may lag behind expressive language development in autism spectrum disorder, receptive and expressive language skills should be considered separately.

The specifier “associated with a known medical or genetic condition or environmental factor” should be used when the individual has a known genetic disorder (e.g., Rett syndrome, Fragile X syndrome, Down syndrome), a medical disorder (e.g. epilepsy), or a history of environmental exposure (e.g., valproate, fetal alcohol syndrome, very low birth weight).

Additional neurodevelopmental, mental or behavioral conditions should also be noted (e.g., attention-deficit/hyperactivity disorder; developmental coordination disorder; disruptive behavior, impulse-control, or conduct disorders; anxiety, depressive, or bipolar disorders; tics or Tourette’s disorder; self-injury; feeding, elimination, or sleep disorders).

## Diagnostic Features

The essential features of autism spectrum disorder are persistent impairment in reciprocal social communication and social interaction (Criterion A), and restricted, repetitive patterns of behavior, interests, or activities (Criterion B). These symptoms are present from early childhood and limit or impair everyday functioning (Criteria C and D). The stage at which functional impairment becomes obvious will vary according to characteristics of the individual and his or her environment. Core diagnostic features are evident in the developmental period, but intervention, compensation, and current supports may mask difficulties in at least some contexts. Manifestations of the disorder also vary greatly depending on the severity of the autistic condition, developmental level, and chronological age; hence, the term *spectrum*. Autism spectrum disorder encompasses disorders previously referred to as early infantile autism, childhood autism, Kanner’s autism, high-functioning autism, atypical autism, pervasive developmental disorder not otherwise specified, childhood disintegrative disorder, and Asperger’s disorder.

The impairments in communication and social interaction specified in Criterion A are pervasive and sustained. Diagnoses are most valid and reliable when based on multiple sources of information, including clinician’s observations, caregiver history, and, when possible, self-report. Verbal and nonverbal deficits in social communication have varying manifestations, depending on the individual’s age, intellectual level, and language ability, as well as other factors such as treatment history and current support. Many individuals have language deficits, ranging from complete lack of speech through language delays, poor comprehension of speech, echoed speech, or stilted and overly literal language. Even when formal language skills (e.g., vocabulary, grammar) are intact, the use of language for reciprocal social communication is impaired in autism spectrum disorder.

Deficits in social-emotional reciprocity (i.e., the ability to engage with others and share thoughts and feelings) are clearly evident in young children with the disorder, who may show little or no initiation of social interaction and no sharing of emotions, along with reduced or absent imitation of others’ behavior. What language exists is often one-sided, lacking in social reciprocity, and used to request or label rather than to comment, share feelings, or converse. In adults without intellectual disabilities or language delays, deficits in social-emotional reciprocity may be most apparent in difficulties processing and responding to complex social cues (e.g., when and how to join a conversation, what not to say). Adults who have developed compensation strategies for some social challenges still struggle in novel or unsupported situations and suffer from the effort and anxiety of consciously calculating what is socially intuitive for most individuals.

Deficits in nonverbal communicative behaviors used for social interaction are manifested by absent, reduced, or atypical use of eye contact (relative to cultural norms), gestures, facial expressions, body orientation, or speech intonation. An early feature of autism spectrum disorder is impaired joint attention as manifested by a lack of pointing, showing, or bringing objects to share interest with others, or failure to follow someone's pointing or eye gaze. Individuals may learn a few functional gestures, but their repertoire is smaller than that of others, and they often fail to use expressive gestures spontaneously in communication. Among adults with fluent language, the difficulty in coordinating nonverbal communication with speech may give the impression of odd, wooden, or exaggerated "body language" during interactions. Impairment may be relatively subtle within individual modes (e.g., someone may have relatively good eye contact when speaking) but noticeable in poor integration of eye contact, gesture, body posture, prosody, and facial expression for social communication.

Deficits in developing, maintaining, and understanding relationships should be judged against norms for age, gender, and culture. There may be absent, reduced, or atypical social interest, manifested by rejection of others, passivity, or inappropriate approaches that seem aggressive or disruptive. These difficulties are particularly evident in young children, in whom there is often a lack of shared social play and imagination (e.g., age-appropriate flexible pretend play) and, later, insistence on playing by very fixed rules. Older individuals may struggle to understand what behavior is considered appropriate in one situation but not another (e.g., casual behavior during a job interview), or the different ways that language may be used to communicate (e.g., irony, white lies). There may be an apparent preference for solitary activities or for interacting with much younger or older people. Frequently, there is a desire to establish friendships without a complete or realistic idea of what friendship entails (e.g., one-sided friendships or friendships based solely on shared special interests). Relationships with siblings, co-workers, and caregivers are also important to consider (in terms of reciprocity).

Autism spectrum disorder is also defined by restricted, repetitive patterns of behavior, interests, or activities (as specified in Criterion B), which show a range of manifestations according to age and ability, intervention, and current supports. Stereotyped or repetitive behaviors include simple motor stereotypies (e.g., hand flapping, finger flicking), repetitive use of objects (e.g., spinning coins, lining up toys), and repetitive speech (e.g., echolalia, the delayed or immediate parroting of heard words; use of "you" when referring to self; stereotyped use of words, phrases, or prosodic patterns). Excessive adherence to routines and restricted patterns of behavior may be manifest in resistance to change (e.g., distress at apparently small changes, such as in packaging of a favorite food; insistence on adherence to rules; rigidity of thinking) or ritualized patterns of verbal or nonverbal behavior (e.g., repetitive questioning, pacing a perimeter). Highly restricted, fixated interests in autism spectrum disorder tend to be abnormal in intensity or focus (e.g., a toddler strongly attached to a pan; a child preoccupied with vacuum cleaners; an adult spending hours writing out timetables). Some fascinations and routines may relate to apparent hyper- or hyporeactivity to sensory input, manifested through extreme responses to specific sounds or textures, excessive smelling or touching of objects, fascination with lights or spinning objects, and sometimes apparent indifference to pain, heat, or cold. Extreme reaction to or rituals involving taste, smell, texture, or appearance of food or excessive food restrictions are common and may be a presenting feature of autism spectrum disorder.

Many adults with autism spectrum disorder without intellectual or language disabilities learn to suppress repetitive behavior in public. Special interests may be a source of pleasure and motivation and provide avenues for education and employment later in life. Diagnostic criteria may be met when restricted, repetitive patterns of behavior, interests, or activities were clearly present during childhood or at some time in the past, even if symptoms are no longer present.

Criterion D requires that the features must cause clinically significant impairment in social, occupational, or other important areas of current functioning. Criterion E specifies that the social communication deficits, although sometimes accompanied by intellectual disability (intellectual developmental disorder), are not in line with the individual's developmental level; impairments exceed difficulties expected on the basis of developmental level.

Standardized behavioral diagnostic instruments with good psychometric properties, including caregiver interviews, questionnaires and clinician observation measures, are available and can improve reliability of diagnosis over time and across clinicians.

## **Associated Features Supporting Diagnosis**

Many individuals with autism spectrum disorder also have intellectual impairment and/or language impairment (e.g., slow to talk, language comprehension behind production). Even those with average or high intelligence have an uneven profile of abilities. The gap between intellectual and adaptive functional skills is often large. Motor deficits are often present, including odd gait, clumsiness, and other abnormal motor signs (e.g., walking on tiptoes). Self-injury (e.g., head banging, biting the wrist) may occur, and disruptive/challenging behaviors are more common in children and adolescents with autism spectrum disorder than other disorders, including intellectual disability. Adolescents and adults with autism spectrum disorder are prone to anxiety and depression. Some individuals develop catatonic-like motor behavior (slowing and "freezing" mid-action), but these are typically not of the magnitude of a catatonic episode. However, it is possible for individuals with autism spectrum disorder to experience a marked deterioration in motor symptoms and display a full catatonic episode with symptoms such as mutism, posturing, grimacing and waxy flexibility. The risk period for comorbid catatonia appears to be greatest in the adolescent years.

## **Prevalence**

In recent years, reported frequencies for autism spectrum disorder across U.S. and non-U.S. countries have approached 1% of the population, with similar estimates in child and adult samples. It remains unclear whether higher rates reflect an expansion of the diagnostic criteria of DSM-IV to include subthreshold cases, increased awareness, differences in study methodology, or a true increase in the frequency of autism spectrum disorder.

## **Development and Course**

The age and pattern of onset also should be noted for autism spectrum disorder. Symptoms are typically recognized during the second year of life (12–24 months of age) but may be seen earlier than 12 months if developmental delays are severe, or noted later than 24 months if symptoms are more subtle. The pattern of onset description might include information about early developmental delays or any losses of social or language skills. In cases where skills have been lost, parents or caregivers may give a history of a gradual or relatively rapid deterioration in social behaviors or language skills. Typically, this would occur between 12 and 24 months of age and is distinguished from the rare instances of developmental regression occurring after at least 2 years of normal development (previously described as childhood disintegrative disorder).

The behavioral features of autism spectrum disorder first become evident in early childhood, with some cases presenting a lack of interest in social interaction in the first year of life. Some children with autism spectrum disorder experience developmental plateaus or regression, with a gradual or relatively rapid deterioration in social behaviors or use of language, often during the first 2 years of life. Such losses are rare in other disorders and may be a useful "red flag" for autism spectrum disorder. Much more unusual and warranting more extensive medical investigation are losses of skills beyond social communication (e.g., loss of self-care, toileting, motor skills) or those occurring after the

second birthday (see also Rett syndrome in the section “Differential Diagnosis” for this disorder).

First symptoms of autism spectrum disorder frequently involve delayed language development, often accompanied by lack of social interest or unusual social interactions (e.g., pulling individuals by the hand without any attempt to look at them), odd play patterns (e.g., carrying toys around but never playing with them), and unusual communication patterns (e.g., knowing the alphabet but not responding to own name). Deafness may be suspected but is typically ruled out. During the second year, odd and repetitive behaviors and the absence of typical play become more apparent. Since many typically developing young children have strong preferences and enjoy repetition (e.g., eating the same foods, watching the same video multiple times), distinguishing restricted and repetitive behaviors that are diagnostic of autism spectrum disorder can be difficult in preschoolers. The clinical distinction is based on the type, frequency, and intensity of the behavior (e.g., a child who daily lines up objects for hours and is very distressed if any item is moved).

Autism spectrum disorder is not a degenerative disorder, and it is typical for learning and compensation to continue throughout life. Symptoms are often most marked in early childhood and early school years, with developmental gains typical in later childhood in at least some areas (e.g., increased interest in social interaction). A small proportion of individuals deteriorate behaviorally during adolescence, whereas most others improve. Only a minority of individuals with autism spectrum disorder live and work independently in adulthood; those who do tend to have superior language and intellectual abilities and are able to find a niche that matches their special interests and skills. In general, individuals with lower levels of impairment may be better able to function independently. However, even these individuals may remain socially naive and vulnerable, have difficulties organizing practical demands without aid, and are prone to anxiety and depression. Many adults report using compensation strategies and coping mechanisms to mask their difficulties in public but suffer from the stress and effort of maintaining a socially acceptable facade. Scarcely anything is known about old age in autism spectrum disorder.

Some individuals come for first diagnosis in adulthood, perhaps prompted by the diagnosis of autism in a child in the family or a breakdown of relations at work or home. Obtaining detailed developmental history in such cases may be difficult, and it is important to consider self-reported difficulties. Where clinical observation suggests criteria are currently met, autism spectrum disorder may be diagnosed, provided there is no evidence of good social and communication skills in childhood. For example, the report (by parents or another relative) that the individual had ordinary and sustained reciprocal friendships and good nonverbal communication skills throughout childhood would rule out a diagnosis of autism spectrum disorder; however, the absence of developmental information in itself should not do so.

Manifestations of the social and communication impairments and restricted/repetitive behaviors that define autism spectrum disorder are clear in the developmental period. In later life, intervention or compensation, as well as current supports, may mask these difficulties in at least some contexts. However, symptoms remain sufficient to cause current impairment in social, occupational, or other important areas of functioning.

## Risk and Prognostic Factors

The best established prognostic factors for individual outcome within autism spectrum disorder are presence or absence of associated intellectual disability and language impairment (e.g., functional language by age 5 years is a good prognostic sign) and additional mental health problems. Epilepsy, as a comorbid diagnosis, is associated with greater intellectual disability and lower verbal ability.

**Environmental.** A variety of nonspecific risk factors, such as advanced parental age, low birth weight, or fetal exposure to valproate, may contribute to risk of autism spectrum disorder.

**Genetic and physiological.** Heritability estimates for autism spectrum disorder have ranged from 37% to higher than 90%, based on twin concordance rates. Currently, as many as 15% of cases of autism spectrum disorder appear to be associated with a known genetic mutation, with different *de novo* copy number variants or *de novo* mutations in specific genes associated with the disorder in different families. However, even when an autism spectrum disorder is associated with a known genetic mutation, it does not appear to be fully penetrant. Risk for the remainder of cases appears to be polygenic, with perhaps hundreds of genetic loci making relatively small contributions.

## Culture-Related Diagnostic Issues

Cultural differences will exist in norms for social interaction, nonverbal communication, and relationships, but individuals with autism spectrum disorder are markedly impaired against the norms for their cultural context. Cultural and socioeconomic factors may affect age at recognition or diagnosis; for example, in the United States, late or underdiagnosis of autism spectrum disorder among African American children may occur.

## Gender-Related Diagnostic Issues

Autism spectrum disorder is diagnosed four times more often in males than in females. In clinic samples, females tend to be more likely to show accompanying intellectual disability, suggesting that girls without accompanying intellectual impairments or language delays may go unrecognized, perhaps because of subtler manifestation of social and communication difficulties.

## Functional Consequences of Autism Spectrum Disorder

In young children with autism spectrum disorder, lack of social and communication abilities may hamper learning, especially learning through social interaction or in settings with peers. In the home, insistence on routines and aversion to change, as well as sensory sensitivities, may interfere with eating and sleeping and make routine care (e.g., haircuts, dental work) extremely difficult. Adaptive skills are typically below measured IQ. Extreme difficulties in planning, organization, and coping with change negatively impact academic achievement, even for students with above-average intelligence. During adulthood, these individuals may have difficulties establishing independence because of continued rigidity and difficulty with novelty.

Many individuals with autism spectrum disorder, even without intellectual disability, have poor adult psychosocial functioning as indexed by measures such as independent living and gainful employment. Functional consequences in old age are unknown, but social isolation and communication problems (e.g., reduced help-seeking) are likely to have consequences for health in older adulthood.

## Differential Diagnosis

**Rett syndrome.** Disruption of social interaction may be observed during the regressive phase of Rett syndrome (typically between 1–4 years of age); thus, a substantial proportion of affected young girls may have a presentation that meets diagnostic criteria for autism spectrum disorder. However, after this period, most individuals with Rett syndrome improve their social communication skills, and autistic features are no longer a major area of concern. Consequently, autism spectrum disorder should be considered only when all diagnostic criteria are met.

**Selective mutism.** In selective mutism, early development is not typically disturbed. The affected child usually exhibits appropriate communication skills in certain contexts and settings. Even in settings where the child is mute, social reciprocity is not impaired, nor are restricted or repetitive patterns of behavior present.

**Language disorders and social (pragmatic) communication disorder.** In some forms of language disorder, there may be problems of communication and some secondary social difficulties. However, specific language disorder is not usually associated with abnormal nonverbal communication, nor with the presence of restricted, repetitive patterns of behavior, interests, or activities.

When an individual shows impairment in social communication and social interactions but does not show restricted and repetitive behavior or interests, criteria for social (pragmatic) communication disorder, instead of autism spectrum disorder, may be met. The diagnosis of autism spectrum disorder supersedes that of social (pragmatic) communication disorder whenever the criteria for autism spectrum disorder are met, and care should be taken to enquire carefully regarding past or current restricted/repetitive behavior.

**Intellectual disability (intellectual developmental disorder) without autism spectrum disorder.** Intellectual disability without autism spectrum disorder may be difficult to differentiate from autism spectrum disorder in very young children. Individuals with intellectual disability who have not developed language or symbolic skills also present a challenge for differential diagnosis, since repetitive behavior often occurs in such individuals as well. A diagnosis of autism spectrum disorder in an individual with intellectual disability is appropriate when social communication and interaction are significantly impaired relative to the developmental level of the individual's nonverbal skills (e.g., fine motor skills, nonverbal problem solving). In contrast, intellectual disability is the appropriate diagnosis when there is no apparent discrepancy between the level of social-communicative skills and other intellectual skills.

**Stereotypic movement disorder.** Motor stereotypies are among the diagnostic characteristics of autism spectrum disorder, so an additional diagnosis of stereotypic movement disorder is not given when such repetitive behaviors are better explained by the presence of autism spectrum disorder. However, when stereotypies cause self-injury and become a focus of treatment, both diagnoses may be appropriate.

**Attention-deficit/hyperactivity disorder.** Abnormalities of attention (overly focused or easily distracted) are common in individuals with autism spectrum disorder, as is hyperactivity. A diagnosis of attention-deficit/hyperactivity disorder (ADHD) should be considered when attentional difficulties or hyperactivity exceeds that typically seen in individuals of comparable mental age.

**Schizophrenia.** Schizophrenia with childhood onset usually develops after a period of normal, or near normal, development. A prodromal state has been described in which social impairment and atypical interests and beliefs occur, which could be confused with the social deficits seen in autism spectrum disorder. Hallucinations and delusions, which are defining features of schizophrenia, are not features of autism spectrum disorder. However, clinicians must take into account the potential for individuals with autism spectrum disorder to be concrete in their interpretation of questions regarding the key features of schizophrenia (e.g., "Do you hear voices when no one is there?" "Yes [on the radio]").

## Comorbidity

Autism spectrum disorder is frequently associated with intellectual impairment and structural language disorder (i.e., an inability to comprehend and construct sentences with proper grammar), which should be noted under the relevant specifiers when applicable. Many individuals with autism spectrum disorder have psychiatric symptoms that do not form part of the diagnostic criteria for the disorder (about 70% of individuals with autism spectrum disorder may have one comorbid mental disorder, and 40% may have two or more comorbid mental disorders). When criteria for both ADHD and autism spectrum disorder are met, both diagnoses should be given. This same principle applies to concurrent diagnoses of autism spectrum disorder and developmental coordination disorder, anxiety disorders, depressive

disorders, and other comorbid diagnoses. Among individuals who are nonverbal or have language deficits, observable signs such as changes in sleep or eating and increases in challenging behavior should trigger an evaluation for anxiety or depression. Specific learning difficulties (literacy and numeracy) are common, as is developmental coordination disorder. Medical conditions commonly associated with autism spectrum disorder should be noted under the “associated with a known medical/genetic or environmental/acquired condition” specifier. Such medical conditions include epilepsy, sleep problems, and constipation. Avoidant-restrictive food intake disorder is a fairly frequent presenting feature of autism spectrum disorder, and extreme and narrow food preferences may persist.

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## Attention-Deficit/Hyperactivity Disorder

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### Attention-Deficit/Hyperactivity Disorder

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#### Diagnostic Criteria

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A. A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development, as characterized by (1) and/or (2):

1. **Inattention:** Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:

**Note:** The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required.

- a. Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).
- b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).
- c. Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).
- d. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked).
- e. Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).
- f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).
- g. Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).
- h. Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).
- i. Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).



**2. Hyperactivity and impulsivity:** Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities: **Note:** The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or a failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required.

- a. Often fidgets with or taps hands or feet or squirms in seat.
- b. Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).
- c. Often runs about or climbs in situations where it is inappropriate. (**Note:** In adolescents or adults, may be limited to feeling restless.)
- d. Often unable to play or engage in leisure activities quietly.
- e. Is often "on the go," acting as if "driven by a motor" (e.g., is unable to be or uncomfortable being still for extended time, as in restaurants, meetings; may be experienced by others as being restless or difficult to keep up with).
- f. Often talks excessively.
- g. Often blurts out an answer before a question has been completed (e.g., completes people's sentences; cannot wait for turn in conversation).
- h. Often has difficulty waiting his or her turn (e.g., while waiting in line).
- i. Often interrupts or intrudes on others (e.g., butts into conversations, games, or activities; may start using other people's things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).

- B. Several inattentive or hyperactive-impulsive symptoms were present prior to age 12 years.
- C. Several inattentive or hyperactive-impulsive symptoms are present in two or more settings (e.g., at home, school, or work; with friends or relatives; in other activities).
- D. There is clear evidence that the symptoms interfere with, or reduce the quality of, social, academic, or occupational functioning.
- E. The symptoms do not occur exclusively during the course of schizophrenia or another psychotic disorder and are not better explained by another mental disorder (e.g., mood disorder, anxiety disorder, dissociative disorder, personality disorder, substance intoxication or withdrawal).

**Specify whether:**

**314.01 (F90.2) Combined presentation:** If both Criterion A1 (inattention) and Criterion A2 (hyperactivity-impulsivity) are met for the past 6 months.

**314.00 (F90.0) Predominantly inattentive presentation:** If Criterion A1 (inattention) is met but Criterion A2 (hyperactivity-impulsivity) is not met for the past 6 months.

**314.01 (F90.1) Predominantly hyperactive/impulsive presentation:** If Criterion A2 (hyperactivity-impulsivity) is met and Criterion A1 (inattention) is not met for the past 6 months.

**Specify if:**

**in partial remission:** When full criteria were previously met, fewer than the full criteria have been met for the past 6 months, and the symptoms still result in impairment in social, academic, or occupational functioning.

**Specify current severity:**

**Mild:** Few, if any, symptoms in excess of those required to make the diagnosis are present, and symptoms result in no more than minor impairments in social or occupational functioning.

**Moderate:** Symptoms or functional impairment between "mild" and "severe" are present.

**Severe:** Many symptoms in excess of those required to make the diagnosis, or several symptoms that are particularly severe, are present, or the symptoms result in marked impairment in social or occupational functioning.

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## Diagnostic Features

The essential feature of attention-deficit/hyperactivity disorder (ADHD) is a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development. *Inattention* manifests behaviorally in ADHD as wandering off task, lacking persistence, having difficulty sustaining focus, and being disorganized and is not due to defiance or lack of comprehension. *Hyperactivity* refers to excessive motor activity (such as a child running about) when it is not appropriate, or excessive fidgeting, tapping, or talkativeness. In adults, hyperactivity may manifest as extreme restlessness or wearing others out with their activity. *Impulsivity* refers to hasty actions that occur in the moment without forethought and that have high potential for harm to the individual (e.g., darting into the street without looking). Impulsivity may reflect a desire for immediate rewards or an inability to delay gratification. Impulsive behaviors may manifest as social intrusiveness (e.g., interrupting others excessively) and/or as making important decisions without consideration of long-term consequences (e.g., taking a job without adequate information).

ADHD begins in childhood. The requirement that several symptoms be present before age 12 years conveys the importance of a substantial clinical presentation during childhood. At the same time, an earlier age at onset is not specified because of difficulties in establishing precise childhood onset retrospectively. Adult recall of childhood symptoms tends to be unreliable, and it is beneficial to obtain ancillary information.

Manifestations of the disorder must be present in more than one setting (e.g., home and school, work). Confirmation of substantial symptoms across settings typically cannot be done accurately without consulting informants who have seen the individual in those settings. Typically, symptoms vary depending on context within a given setting. Signs of the disorder may be minimal or absent when the individual is receiving frequent rewards for appropriate behavior, is under close supervision, is in a novel setting, is engaged in especially interesting activities, has consistent external stimulation (e.g., via electronic screens), or is interacting in one-on-one situations (e.g., the clinician's office).

## Associated Features Supporting Diagnosis

Mild delays in language, motor, or social development are not specific to ADHD but often co-occur. Associated features may include low frustration tolerance, irritability, or mood lability. Even in the absence of a specific learning disorder, academic or work performance is often impaired. Inattentive behavior is associated with various underlying cognitive processes, and individuals with ADHD may exhibit cognitive problems on tests of attention, executive function, or memory, although these tests are not sufficiently sensitive or specific to serve as diagnostic indices. By early adulthood, ADHD is associated with an increased risk of suicide attempt, primarily when comorbid with mood, conduct, or substance use disorders.

No biological marker is diagnostic for ADHD. As a group, compared with peers, children with ADHD display increased slow wave electroencephalograms, reduced total brain volume on magnetic resonance imaging, and possibly a delay in posterior to anterior cortical maturation, but these findings are not diagnostic. In the uncommon cases where there is a known genetic cause (e.g., Fragile X syndrome, 22q11 deletion syndrome), the ADHD presentation should still be diagnosed.

## Prevalence

Population surveys suggest that ADHD occurs in most cultures in about 5% of children and about 2.5% of adults.

## Development and Course

Many parents first observe excessive motor activity when the child is a toddler, but symptoms are difficult to distinguish from highly variable normative behaviors before age 4 years. ADHD is most often identified during elementary school years, and inattention becomes more prominent and impairing. The disorder is relatively stable through early adolescence, but some individuals have a worsened course with development of antisocial behaviors. In most individuals with ADHD, symptoms of motoric hyperactivity become less obvious in adolescence and adulthood, but difficulties with restlessness, inattention, poor planning, and impulsivity persist. A substantial proportion of children with ADHD remain relatively impaired into adulthood.

In preschool, the main manifestation is hyperactivity. Inattention becomes more prominent during elementary school. During adolescence, signs of hyperactivity (e.g., running and climbing) are less common and may be confined to fidgetiness or an inner feeling of jitteriness, restlessness, or impatience. In adulthood, along with inattention and restlessness, impulsivity may remain problematic even when hyperactivity has diminished.

## Risk and Prognostic Factors

**Temperamental.** ADHD is associated with reduced behavioral inhibition, effortful control, or constraint; negative emotionality; and/or elevated novelty seeking. These traits may predispose some children to ADHD but are not specific to the disorder.

**Environmental.** Very low birth weight (less than 1,500 grams) conveys a two- to three-fold risk for ADHD, but most children with low birth weight do not develop ADHD. Although ADHD is correlated with smoking during pregnancy, some of this association reflects common genetic risk. A minority of cases may be related to reactions to aspects of diet. There may be a history of child abuse, neglect, multiple foster placements, neurotoxin exposure (e.g., lead), infections (e.g., encephalitis), or alcohol exposure in utero. Exposure to environmental toxicants has been correlated with subsequent ADHD, but it is not known whether these associations are causal.

**Genetic and physiological.** ADHD is elevated in the first-degree biological relatives of individuals with ADHD. The heritability of ADHD is substantial. While specific genes have been correlated with ADHD, they are neither necessary nor sufficient causal factors. Visual and hearing impairments, metabolic abnormalities, sleep disorders, nutritional deficiencies, and epilepsy should be considered as possible influences on ADHD symptoms.

ADHD is not associated with specific physical features, although rates of minor physical anomalies (e.g., hypertelorism, highly arched palate, low-set ears) may be relatively elevated. Subtle motor delays and other neurological soft signs may occur. (Note that marked co-occurring clumsiness and motor delays should be coded separately [e.g., developmental coordination disorder].)

**Course modifiers.** Family interaction patterns in early childhood are unlikely to cause ADHD but may influence its course or contribute to secondary development of conduct problems.

## Culture-Related Diagnostic Issues

Differences in ADHD prevalence rates across regions appear attributable mainly to different diagnostic and methodological practices. However, there also may be cultural variation in attitudes toward or interpretations of children's behaviors. Clinical identification rates in the United States for African American and Latino populations tend to be lower than for Caucasian populations. Informant symptom ratings may be influenced by cultural group of the child and the informant, suggesting that culturally appropriate practices are relevant in assessing ADHD.

## Gender-Related Diagnostic Issues

ADHD is more frequent in males than in females in the general population, with a ratio of approximately 2:1 in children and 1.6:1 in adults. Females are more likely than males to present primarily with inattentive features.

## Functional Consequences of Attention-Deficit/Hyperactivity Disorder

ADHD is associated with reduced school performance and academic attainment, social rejection, and, in adults, poorer occupational performance, attainment, attendance, and higher probability of unemployment as well as elevated interpersonal conflict. Children with ADHD are significantly more likely than their peers without ADHD to develop conduct disorder in adolescence and antisocial personality disorder in adulthood, consequently increasing the likelihood for substance use disorders and incarceration. The risk of subsequent substance use disorders is elevated, especially when conduct disorder or antisocial personality disorder develops. Individuals with ADHD are more likely than peers to be injured. Traffic accidents and violations are more frequent in drivers with ADHD. There may be an elevated likelihood of obesity among individuals with ADHD.

Inadequate or variable self-application to tasks that require sustained effort is often interpreted by others as laziness, irresponsibility, or failure to cooperate. Family relationships may be characterized by discord and negative interactions. Peer relationships are often disrupted by peer rejection, neglect, or teasing of the individual with ADHD. On average, individuals with ADHD obtain less schooling, have poorer vocational achievement, and have reduced intellectual scores than their peers, although there is great variability. In its severe form, the disorder is markedly impairing, affecting social, familial, and scholastic/occupational adjustment.

Academic deficits, school-related problems, and peer neglect tend to be most associated with elevated symptoms of inattention, whereas peer rejection and, to a lesser extent, accidental injury are most salient with marked symptoms of hyperactivity or impulsivity.

## Differential Diagnosis

**Oppositional defiant disorder.** Individuals with oppositional defiant disorder may resist work or school tasks that require self-application because they resist conforming to others' demands. Their behavior is characterized by negativity, hostility, and defiance. These symptoms must be differentiated from aversion to school or mentally demanding tasks due to difficulty in sustaining mental effort, forgetting instructions, and impulsivity in individuals with ADHD. Complicating the differential diagnosis is the fact that some individuals with ADHD may develop secondary oppositional attitudes toward such tasks and devalue their importance.

**Intermittent explosive disorder.** ADHD and intermittent explosive disorder share high levels of impulsive behavior. However, individuals with intermittent explosive disorder show serious aggression toward others, which is not characteristic of ADHD, and they do not experience problems with sustaining attention as seen in ADHD. In addition, intermittent explosive disorder is rare in childhood. Intermittent explosive disorder may be diagnosed in the presence of ADHD.

**Other neurodevelopmental disorders.** The increased motoric activity that may occur in ADHD must be distinguished from the repetitive motor behavior that characterizes stereotypic movement disorder and some cases of autism spectrum disorder. In stereotypic movement disorder, the motoric behavior is generally fixed and repetitive (e.g., body rocking, self-biting), whereas the fidgetiness and restlessness in ADHD are typically generalized and not characterized by repetitive stereotypic movements. In Tourette's disorder,

frequent multiple tics can be mistaken for the generalized fidgetiness of ADHD. Prolonged observation may be needed to differentiate fidgetiness from bouts of multiple tics.

**Specific learning disorder.** Children with specific learning disorder may appear inattentive because of frustration, lack of interest, or limited ability. However, inattention in individuals with a specific learning disorder who do not have ADHD is not impairing outside of academic work.

**Intellectual disability (intellectual developmental disorder).** Symptoms of ADHD are common among children placed in academic settings that are inappropriate to their intellectual ability. In such cases, the symptoms are not evident during non-academic tasks. A diagnosis of ADHD in intellectual disability requires that inattention or hyperactivity be excessive for mental age.

**Autism spectrum disorder.** Individuals with ADHD and those with autism spectrum disorder exhibit inattention, social dysfunction, and difficult-to-manage behavior. The social dysfunction and peer rejection seen in individuals with ADHD must be distinguished from the social disengagement, isolation, and indifference to facial and tonal communication cues seen in individuals with autism spectrum disorder. Children with autism spectrum disorder may display tantrums because of an inability to tolerate a change from their expected course of events. In contrast, children with ADHD may misbehave or have a tantrum during a major transition because of impulsivity or poor self-control.

**Reactive attachment disorder.** Children with reactive attachment disorder may show social disinhibition, but not the full ADHD symptom cluster, and display other features such as a lack of enduring relationships that are not characteristic of ADHD.

**Anxiety disorders.** ADHD shares symptoms of inattention with anxiety disorders. Individuals with ADHD are inattentive because of their attraction to external stimuli, new activities, or preoccupation with enjoyable activities. This is distinguished from the inattention due to worry and rumination seen in anxiety disorders. Restlessness might be seen in anxiety disorders. However, in ADHD, the symptom is not associated with worry and rumination.

**Depressive disorders.** Individuals with depressive disorders may present with inability to concentrate. However, poor concentration in mood disorders becomes prominent only during a depressive episode.

**Bipolar disorder.** Individuals with bipolar disorder may have increased activity, poor concentration, and increased impulsivity, but these features are episodic, occurring several days at a time. In bipolar disorder, increased impulsivity or inattention is accompanied by elevated mood, grandiosity, and other specific bipolar features. Children with ADHD may show significant changes in mood within the same day; such lability is distinct from a manic episode, which must last 4 or more days to be a clinical indicator of bipolar disorder, even in children. Bipolar disorder is rare in preadolescents, even when severe irritability and anger are prominent, whereas ADHD is common among children and adolescents who display excessive anger and irritability.

**Disruptive mood dysregulation disorder.** Disruptive mood dysregulation disorder is characterized by pervasive irritability, and intolerance of frustration, but impulsiveness and disorganized attention are not essential features. However, most children and adolescents with the disorder have symptoms that also meet criteria for ADHD, which is diagnosed separately.

**Substance use disorders.** Differentiating ADHD from substance use disorders may be problematic if the first presentation of ADHD symptoms follows the onset of abuse or frequent use. Clear evidence of ADHD before substance misuse from informants or previous records may be essential for differential diagnosis.

**Personality disorders.** In adolescents and adults, it may be difficult to distinguish ADHD from borderline, narcissistic, and other personality disorders. All these disorders tend to share the features of disorganization, social intrusiveness, emotional dysregulation, and cognitive dysregulation. However, ADHD is not characterized by fear of abandonment, self-injury, extreme ambivalence, or other features of personality disorder. It may take extended clinical observation, informant interview, or detailed history to distinguish impulsive, socially intrusive, or inappropriate behavior from narcissistic, aggressive, or domineering behavior to make this differential diagnosis.

**Psychotic disorders.** ADHD is not diagnosed if the symptoms of inattention and hyperactivity occur exclusively during the course of a psychotic disorder.

**Medication-induced symptoms of ADHD.** Symptoms of inattention, hyperactivity, or impulsivity attributable to the use of medication (e.g., bronchodilators, isoniazid, neuroleptics [resulting in akathisia], thyroid replacement medication) are diagnosed as other specified or unspecified other (or unknown) substance-related disorders.

**Neurocognitive disorders.** Early major neurocognitive disorder (dementia) and/or mild neurocognitive disorder are not known to be associated with ADHD but may present with similar clinical features. These conditions are distinguished from ADHD by their late onset.

## Comorbidity

In clinical settings, comorbid disorders are frequent in individuals whose symptoms meet criteria for ADHD. In the general population, oppositional defiant disorder co-occurs with ADHD in approximately half of children with the combined presentation and about a quarter with the predominantly inattentive presentation. Conduct disorder co-occurs in about a quarter of children or adolescents with the combined presentation, depending on age and setting. Most children and adolescents with disruptive mood dysregulation disorder have symptoms that also meet criteria for ADHD; a lesser percentage of children with ADHD have symptoms that meet criteria for disruptive mood dysregulation disorder. Specific learning disorder commonly co-occurs with ADHD. Anxiety disorders and major depressive disorder occur in a minority of individuals with ADHD but more often than in the general population. Intermittent explosive disorder occurs in a minority of adults with ADHD, but at rates above population levels. Although substance use disorders are relatively more frequent among adults with ADHD in the general population, the disorders are present in only a minority of adults with ADHD. In adults, antisocial and other personality disorders may co-occur with ADHD. Other disorders that may co-occur with ADHD include obsessive-compulsive disorder, tic disorders, and autism spectrum disorder.

# Other Specified Attention-Deficit/ Hyperactivity Disorder

314.01 (F90.8)

This category applies to presentations in which symptoms characteristic of attention-deficit/hyperactivity disorder that cause clinically significant distress or impairment in social, occupational or other important areas of functioning predominate but do not meet the full criteria for attention-deficit/hyperactivity disorder or any of the disorders in the neurodevelopmental disorders diagnostic class. The other specified attention-deficit/hyperactivity disorder category is used in situations in which the clinician chooses to communicate

# Tic Disorders

## Diagnostic Criteria

**Note:** A tic is a sudden, rapid, recurrent, nonrhythmic motor movement or vocalization.

### **Tourette's Disorder** **307.23 (F95.2)**

- A. Both multiple motor and one or more vocal tics have been present at some time during the illness, although not necessarily concurrently.
- B. The tics may wax and wane in frequency but have persisted for more than 1 year since first tic onset.
- C. Onset is before age 18 years.
- D. The disturbance is not attributable to the physiological effects of a substance (e.g., cocaine) or another medical condition (e.g., Huntington's disease, postviral encephalitis).

### **Persistent (Chronic) Motor or Vocal Tic Disorder** **307.22 (F95.1)**

- A. Single or multiple motor or vocal tics have been present during the illness, but not both motor and vocal.
- B. The tics may wax and wane in frequency but have persisted for more than 1 year since first tic onset.
- C. Onset is before age 18 years.
- D. The disturbance is not attributable to the physiological effects of a substance (e.g., cocaine) or another medical condition (e.g., Huntington's disease, postviral encephalitis).
- E. Criteria have never been met for Tourette's disorder.

*Specify if:*

**With motor tics only**

**With vocal tics only**

### **Provisional Tic Disorder** **307.21 (F95.0)**

- A. Single or multiple motor and/or vocal tics.
- B. The tics have been present for less than 1 year since first tic onset.
- C. Onset is before age 18 years.
- D. The disturbance is not attributable to the physiological effects of a substance (e.g., cocaine) or another medical condition (e.g., Huntington's disease, postviral encephalitis).
- E. Criteria have never been met for Tourette's disorder or persistent (chronic) motor or vocal tic disorder.

## Specifiers

The "motor tics only" or "vocal tics only" specifier is only required for persistent (chronic) motor or vocal tic disorder.

## Diagnostic Features

Tic disorders comprise four diagnostic categories: Tourette's disorder, persistent (chronic) motor or vocal tic disorder, provisional tic disorder, and the other specified and unspecified tic disorders. Diagnosis for any tic disorder is based on the presence of motor and/or vocal tics (Criterion A), duration of tic symptoms (Criterion B), age at onset (Criterion C), and absence of any known cause such as another medical condition or substance use (Criterion D). The tic disorders are hierarchical in order (i.e., Tourette's disorder, followed by persistent [chronic] motor or vocal tic disorder, followed by provisional tic disorder, followed by the

other specified and unspecified tic disorders), such that once a tic disorder at one level of the hierarchy is diagnosed, a lower hierarchy diagnosis cannot be made (Criterion E).

Tics are sudden, rapid, recurrent, nonrhythmic motor movements or vocalizations. An individual may have various tic symptoms over time, but at any point in time, the tic repertoire recurs in a characteristic fashion. Although tics can include almost any muscle group or vocalization, certain tic symptoms, such as eye blinking or throat clearing, are common across patient populations. Tics are generally experienced as involuntary but can be voluntarily suppressed for varying lengths of time.

Tics can be either simple or complex. *Simple motor tics* are of short duration (i.e., milliseconds) and can include eye blinking, shoulder shrugging, and extension of the extremities. Simple vocal tics include throat clearing, sniffing, and grunting often caused by contraction of the diaphragm or muscles of the oropharynx. *Complex motor tics* are of longer duration (i.e., seconds) and often include a combination of simple tics such as simultaneous head turning and shoulder shrugging. Complex tics can appear purposeful, such as a tic-like sexual or obscene gesture (*copropraxia*) or a tic-like imitation of someone else's movements (*echopraxia*). Similarly, complex vocal tics include repeating one's own sounds or words (*palilalia*), repeating the last-heard word or phrase (*echolalia*), or uttering socially unacceptable words, including obscenities, or ethnic, racial, or religious slurs (*coprolalia*). Importantly, coprolalia is an abrupt, sharp bark or grunt utterance and lacks the prosody of similar inappropriate speech observed in human interactions.

The presence of motor and/or vocal tics varies across the four tic disorders (Criterion A). For Tourette's disorder, both motor and vocal tics must be present, whereas for persistent (chronic) motor or vocal tic disorder, only motor or only vocal tics are present. For provisional tic disorder, motor and/or vocal tics may be present. For other specified or unspecified tic disorders, the movement disorder symptoms are best characterized as tics but are atypical in presentation or age at onset, or have a known etiology.

The 1-year minimum duration criterion (Criterion B) assures that individuals diagnosed with either Tourette's disorder or persistent (chronic) motor or vocal tic disorder have had persistent symptoms. Tics wax and wane in severity, and some individuals may have tic-free periods of weeks to months; however, an individual who has had tic symptoms of greater than 1 year's duration since first tic onset would be considered to have persistent symptoms regardless of duration of tic-free periods. For an individual with motor and/or vocal tics of less than 1 year since first tic onset, a provisional tic disorder diagnosis can be considered. There is no duration specification for other specified and unspecified tic disorders. The onset of tics must occur prior to age 18 years (Criterion C). Tic disorders typically begin in the prepubertal period, with an average age at onset between 4 and 6 years, and with the incidence of new-onset tic disorders decreasing in the teen years. New onset of tic symptoms in adulthood is exceedingly rare and is often associated with exposures to drugs (e.g., excessive cocaine use) or is a result of a central nervous system insult (e.g., postviral encephalitis). Although tic onset is uncommon in teenagers and adults, it is not uncommon for adolescents and adults to present for an initial diagnostic assessment and, when carefully evaluated, provide a history of milder symptoms dating back to childhood. New-onset abnormal movements suggestive of tics outside of the usual age range should result in evaluation for other movement disorders or for specific etiologies.

Tic symptoms cannot be attributable to the physiological effects of a substance or another medical condition (Criterion D). When there is strong evidence from the history, physical examination, and/or laboratory results to suggest a plausible, proximal, and probable cause for a tic disorder, a diagnosis of other specified tic disorder should be used.

Having previously met diagnostic criteria for Tourette's disorder negates a possible diagnosis of persistent (chronic) motor or vocal tic disorder (Criterion E). Similarly, a previous diagnosis of persistent (chronic) motor or vocal tic disorder negates a diagnosis of provisional tic disorder or other specified or unspecified tic disorder (Criterion E).



## Prevalence

Tics are common in childhood but transient in most cases. The estimated prevalence of Tourette's disorder ranges from 3 to 8 per 1,000 in school-age children. Males are more commonly affected than females, with the ratio varying from 2:1 to 4:1. A national survey in the United States estimated 3 per 1,000 for the prevalence of clinically identified cases. The frequency of identified cases was lower among African Americans and Hispanic Americans, which may be related to differences in access to care.

## Development and Course

Onset of tics is typically between ages 4 and 6 years. Peak severity occurs between ages 10 and 12 years, with a decline in severity during adolescence. Many adults with tic disorders experience diminished symptoms. A small percentage of individuals will have persistently severe or worsening symptoms in adulthood.

Tic symptoms manifest similarly in all age groups and across the lifespan. Tics wax and wane in severity and change in affected muscle groups and vocalizations over time. As children get older, they begin to report their tics being associated with a premonitory urge—a somatic sensation that precedes the tic—and a feeling of tension reduction following the expression of the tic. Tics associated with a premonitory urge may be experienced as not completely “involuntary” in that the urge and the tic can be resisted. An individual may also feel the need to perform a tic in a specific way or repeat it until he or she achieves the feeling that the tic has been done “just right.”

The vulnerability toward developing co-occurring conditions changes as individuals pass through the age of risk for various co-occurring conditions. For example, prepubertal children with tic disorders are more likely to experience attention-deficit/hyperactivity disorder (ADHD), obsessive-compulsive disorder (OCD), and separation anxiety disorder than are teenagers and adults, who are more likely to experience the new onset of major depressive disorder, substance use disorder, or bipolar disorder.

## Risk and Prognostic Factors

**Temperamental.** Tics are worsened by anxiety, excitement, and exhaustion and are better during calm, focused activities. Individuals may have fewer tics when engaged in schoolwork or tasks at work than when relaxing at home after school or in the evening. Stressful/exciting events (e.g., taking a test, participating in exciting activities) often make tics worse.

**Environmental.** Observing a gesture or sound in another person may result in an individual with a tic disorder making a similar gesture or sound, which may be incorrectly perceived by others as purposeful. This can be a particular problem when the individual is interacting with authority figures (e.g., teachers, supervisors, police).

**Genetic and physiological.** Genetic and environmental factors influence tic symptom expression and severity. Important risk alleles for Tourette's disorder and rare genetic variants in families with tic disorders have been identified. Obstetrical complications, older paternal age, lower birth weight, and maternal smoking during pregnancy are associated with worse tic severity.

## Culture-Related Diagnostic Issues

Tic disorders do not appear to vary in clinical characteristics, course, or etiology by race, ethnicity, and culture. However, race, ethnicity, and culture may impact how tic disorders are perceived and managed in the family and community, as well as influencing patterns of help seeking, and choices of treatment.

## Gender-Related Diagnostic Issues

Males are more commonly affected than females, but there are no gender differences in the kinds of tics, age at onset, or course. Women with persistent tic disorders may be more likely to experience anxiety and depression.

## Functional Consequences of Tic Disorders

Many individuals with mild to moderate tic severity experience no distress or impairment in functioning and may even be unaware of their tics. Individuals with more severe symptoms generally have more impairment in daily living, but even individuals with moderate or even severe tic disorders may function well. The presence of a co-occurring condition, such as ADHD or OCD, can have greater impact on functioning. Less commonly, tics disrupt functioning in daily activities and result in social isolation, interpersonal conflict, peer victimization, inability to work or to go to school, and lower quality of life. The individual also may experience substantial psychological distress. Rare complications of Tourette's disorder include physical injury, such as eye injury (from hitting oneself in the face), and orthopedic and neurological injury (e.g., disc disease related to forceful head and neck movements).

## Differential Diagnosis

**Abnormal movements that may accompany other medical conditions and stereotypic movement disorder.** *Motor stereotypies* are defined as involuntary rhythmic, repetitive, predictable movements that appear purposeful but serve no obvious adaptive function or purpose and stop with distraction. Examples include repetitive hand waving/rotating, arm flapping, and finger wiggling. Motor stereotypies can be differentiated from tics based on the former's earlier age at onset (younger than 3 years), prolonged duration (seconds to minutes), constant repetitive fixed form and location, exacerbation when engrossed in activities, lack of a premonitory urge, and cessation with distraction (e.g., name called or touched). *Chorea* represents rapid, random, continual, abrupt, irregular, unpredictable, nonstereotyped actions that are usually bilateral and affect all parts of the body (i.e., face, trunk, and limbs). The timing, direction, and distribution of movements vary from moment to moment, and movements usually worsen during attempted voluntary action. *Dystonia* is the simultaneous sustained contracture of both agonist and antagonist muscles, resulting in a distorted posture or movement of parts of the body. Dystonic postures are often triggered by attempts at voluntary movements and are not seen during sleep.

**Substance-induced and paroxysmal dyskinesias.** Paroxysmal dyskinesias usually occur as dystonic or choreoathetoid movements that are precipitated by voluntary movement or exertion and less commonly arise from normal background activity.

**Myoclonus.** Myoclonus is characterized by a sudden unidirectional movement that is often nonrhythmic. It may be worsened by movement and occur during sleep. Myoclonus is differentiated from tics by its rapidity, lack of suppressibility, and absence of a premonitory urge.

**Obsessive-compulsive and related disorders.** Differentiating obsessive-compulsive behaviors from tics may be difficult. Clues favoring an obsessive-compulsive behavior include a cognitive-based drive (e.g., fear of contamination) and the need to perform the action in a particular fashion a certain number of times, equally on both sides of the body, or until a "just right" feeling is achieved. Impulse-control problems and other repetitive behaviors, including persistent hair pulling, skin picking, and nail biting, appear more goal directed and complex than tics.

# Comorbidity

Many medical and psychiatric conditions have been described as co-occurring with tic disorders, with ADHD and obsessive-compulsive and related disorders being particularly common. The obsessive-compulsive symptoms observed in tic disorder tend to be characterized by more aggressive symmetry and order symptoms and poorer response to pharmacotherapy with selective serotonin reuptake inhibitors. Children with ADHD may demonstrate disruptive behavior, social immaturity, and learning difficulties that may interfere with academic progress and interpersonal relationships and lead to greater impairment than that caused by a tic disorder. Individuals with tic disorders can also have other movement disorders and other mental disorders, such as depressive, bipolar, or substance use disorders.

## Other Specified Tic Disorder

**307.20 (F95.8)**

This category applies to presentations in which symptoms characteristic of a tic disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for a tic disorder or any of the disorders in the neurodevelopmental disorders diagnostic class. The other specified tic disorder category is used in situations in which the clinician chooses to communicate the specific reason that the presentation does not meet the criteria for a tic disorder or any specific neurodevelopmental disorder. This is done by recording “other specified tic disorder” followed by the specific reason (e.g., “with onset after age 18 years”).

## Unspecified Tic Disorder

**307.20 (F95.9)**

This category applies to presentations in which symptoms characteristic of a tic disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for a tic disorder or for any of the disorders in the neurodevelopmental disorders diagnostic class. The unspecified tic disorder category is used in situations in which the clinician chooses *not* to specify the reason that the criteria are not met for a tic disorder or for a specific neurodevelopmental disorder, and includes presentations in which there is insufficient information to make a more specific diagnosis.

disorder is not a distinct nosological category. Thus, dimensional assessments of depression and mania for all psychotic disorders alert clinicians to mood pathology and the need to treat where appropriate. The Section III scale also includes a dimensional assessment of cognitive impairment. Many individuals with psychotic disorders have impairments in a range of cognitive domains that predict functional status. Clinical neuropsychological assessment can help guide diagnosis and treatment, but brief assessments without formal neuropsychological assessment can provide useful information that can be sufficient for diagnostic purposes. Formal neuropsychological testing, when conducted, should be administered and scored by personnel trained in the use of testing instruments. If a formal neuropsychological assessment is not conducted, the clinician should use the best available information to make a judgment. Further research on these assessments is necessary in order to determine their clinical utility; thus, the assessments available in Section III should serve as a prototype to stimulate such research.

## Schizotypal (Personality) Disorder

Criteria and text for schizotypal personality disorder can be found in the chapter "Personality Disorders." Because this disorder is considered part of the schizophrenia spectrum of disorders, and is labeled in this section of ICD-9 and ICD-10 as schizotypal disorder, it is listed in this chapter and discussed in detail in the DSM-5 chapter "Personality Disorders."

## Delusional Disorder

### Diagnostic Criteria

**297.1 (F22)**

- A. The presence of one (or more) delusions with a duration of 1 month or longer.
- B. Criterion A for schizophrenia has never been met.  
**Note:** Hallucinations, if present, are not prominent and are related to the delusional theme (e.g., the sensation of being infested with insects associated with delusions of infestation).
- C. Apart from the impact of the delusion(s) or its ramifications, functioning is not markedly impaired, and behavior is not obviously bizarre or odd.
- D. If manic or major depressive episodes have occurred, these have been brief relative to the duration of the delusional periods.
- E. The disturbance is not attributable to the physiological effects of a substance or another medical condition and is not better explained by another mental disorder, such as body dysmorphic disorder or obsessive-compulsive disorder.

#### **Specify whether:**

**Erotomanic type:** This subtype applies when the central theme of the delusion is that another person is in love with the individual.

**Grandiose type:** This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.

**Jealous type:** This subtype applies when the central theme of the individual's delusion is that his or her spouse or lover is unfaithful.

**Persecutory type:** This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed, or obstructed in the pursuit of long-term goals.

**Somatic type:** This subtype applies when the central theme of the delusion involves bodily functions or sensations.

**Mixed type:** This subtype applies when no one delusional theme predominates.

**Unspecified type:** This subtype applies when the dominant delusional belief cannot be clearly determined or is not described in the specific types (e.g., referential delusions without a prominent persecutory or grandiose component).

*Specify if:*

**With bizarre content:** Delusions are deemed bizarre if they are clearly implausible, not understandable, and not derived from ordinary life experiences (e.g., an individual's belief that a stranger has removed his or her internal organs and replaced them with someone else's organs without leaving any wounds or scars).

*Specify if:*

The following course specifiers are only to be used after a 1-year duration of the disorder:

**First episode, currently in acute episode:** First manifestation of the disorder meeting the defining diagnostic symptom and time criteria. An *acute episode* is a time period in which the symptom criteria are fulfilled.

**First episode, currently in partial remission:** *Partial remission* is a time period during which an improvement after a previous episode is maintained and in which the defining criteria of the disorder are only partially fulfilled.

**First episode, currently in full remission:** *Full remission* is a period of time after a previous episode during which no disorder-specific symptoms are present.

**Multiple episodes, currently in acute episode**

**Multiple episodes, currently in partial remission**

**Multiple episodes, currently in full remission**

**Continuous:** Symptoms fulfilling the diagnostic symptom criteria of the disorder are remaining for the majority of the illness course, with subthreshold symptom periods being very brief relative to the overall course.

**Unspecified**

*Specify current severity:*

Severity is rated by a quantitative assessment of the primary symptoms of psychosis, including delusions, hallucinations, disorganized speech, abnormal psychomotor behavior, and negative symptoms. Each of these symptoms may be rated for its current severity (most severe in the last 7 days) on a 5-point scale ranging from 0 (not present) to 4 (present and severe). (See Clinician-Rated Dimensions of Psychosis Symptom Severity in the chapter "Assessment Measures.")

**Note:** Diagnosis of delusional disorder can be made without using this severity specifier.

## Subtypes

In *erotomanic type*, the central theme of the delusion is that another person is in love with the individual. The person about whom this conviction is held is usually of higher status (e.g., a famous individual or a superior at work) but can be a complete stranger. Efforts to contact the object of the delusion are common. In *grandiose type*, the central theme of the delusion is the conviction of having some great talent or insight or of having made some important discovery. Less commonly, the individual may have the delusion of having a special relationship with a prominent individual or of being a prominent person (in which case the actual individual may be regarded as an impostor). Grandiose delusions may have a religious content. In *jealous type*, the central theme of the delusion is that of an unfaithful partner. This belief is arrived at without due cause and is based on incorrect inferences supported by small bits of "evidence" (e.g., disarrayed clothing). The individual with the delusion usually confronts the spouse or lover and attempts to intervene in the imagined infidelity. In *persecutory type*, the central theme of the delusion involves the in-

dividual's belief of being conspired against, cheated, spied on, followed, poisoned, maliciously maligned, harassed, or obstructed in the pursuit of long-term goals. Small slights may be exaggerated and become the focus of a delusional system. The affected individual may engage in repeated attempts to obtain satisfaction by legal or legislative action. Individuals with persecutory delusions are often resentful and angry and may resort to violence against those they believe are hurting them. In *somatic type*, the central theme of the delusion involves bodily functions or sensations. Somatic delusions can occur in several forms. Most common is the belief that the individual emits a foul odor; that there is an infestation of insects on or in the skin; that there is an internal parasite; that certain parts of the body are misshapen or ugly; or that parts of the body are not functioning.

## Diagnostic Features

The essential feature of delusional disorder is the presence of one or more delusions that persist for at least 1 month (Criterion A). A diagnosis of delusional disorder is not given if the individual has ever had a symptom presentation that met Criterion A for schizophrenia (Criterion B). Apart from the direct impact of the delusions, impairments in psychosocial functioning may be more circumscribed than those seen in other psychotic disorders such as schizophrenia, and behavior is not obviously bizarre or odd (Criterion C). If mood episodes occur concurrently with the delusions, the total duration of these mood episodes is brief relative to the total duration of the delusional periods (Criterion D). The delusions are not attributable to the physiological effects of a substance (e.g., cocaine) or another medical condition (e.g., Alzheimer's disease) and are not better explained by another mental disorder, such as body dysmorphic disorder or obsessive-compulsive disorder (Criterion E).

In addition to the five symptom domain areas identified in the diagnostic criteria, the assessment of cognition, depression, and mania symptom domains is vital for making critically important distinctions between the various schizophrenia spectrum and other psychotic disorders.

## Associated Features Supporting Diagnosis

Social, marital, or work problems can result from the delusional beliefs of delusional disorder. Individuals with delusional disorder may be able to factually describe that others view their beliefs as irrational but are unable to accept this themselves (i.e., there may be "factual insight" but no true insight). Many individuals develop irritable or dysphoric mood, which can usually be understood as a reaction to their delusional beliefs. Anger and violent behavior can occur with persecutory, jealous, and erotomantic types. The individual may engage in litigious or antagonistic behavior (e.g., sending hundreds of letters of protest to the government). Legal difficulties can occur, particularly in jealous and erotomantic types.

## Prevalence

The lifetime prevalence of delusional disorder has been estimated at around 0.2%, and the most frequent subtype is persecutory. Delusional disorder, jealous type, is probably more common in males than in females, but there are no major gender differences in the overall frequency of delusional disorder.

## Development and Course

On average, global function is generally better than that observed in schizophrenia. Although the diagnosis is generally stable, a proportion of individuals go on to develop

schizophrenia. Delusional disorder has a significant familial relationship with both schizophrenia and schizotypal personality disorder. Although it can occur in younger age groups, the condition may be more prevalent in older individuals.

## Culture-Related Diagnostic Issues

An individual's cultural and religious background must be taken into account in evaluating the possible presence of delusional disorder. The content of delusions also varies across cultural contexts.

## Functional Consequences of Delusional Disorder

The functional impairment is usually more circumscribed than that seen with other psychotic disorders, although in some cases, the impairment may be substantial and include poor occupational functioning and social isolation. When poor psychosocial functioning is present, delusional beliefs themselves often play a significant role. A common characteristic of individuals with delusional disorder is the apparent normality of their behavior and appearance when their delusional ideas are not being discussed or acted on.

## Differential Diagnosis

**Obsessive-compulsive and related disorders.** If an individual with obsessive-compulsive disorder is completely convinced that his or her obsessive-compulsive disorder beliefs are true, then the diagnosis of obsessive-compulsive disorder, with absent insight/delusional beliefs specifier, should be given rather than a diagnosis of delusional disorder. Similarly, if an individual with body dysmorphic disorder is completely convinced that his or her body dysmorphic disorder beliefs are true, then the diagnosis of body dysmorphic disorder, with absent insight/delusional beliefs specifier, should be given rather than a diagnosis of delusional disorder.

**Delirium, major neurocognitive disorder, psychotic disorder due to another medical condition, and substance/medication-induced psychotic disorder.** Individuals with these disorders may present with symptoms that suggest delusional disorder. For example, simple persecutory delusions in the context of major neurocognitive disorder would be diagnosed as major neurocognitive disorder, with behavioral disturbance. A substance/medication-induced psychotic disorder cross-sectionally may be identical in symptomatology to delusional disorder but can be distinguished by the chronological relationship of substance use to the onset and remission of the delusional beliefs.

**Schizophrenia and schizophreniform disorder.** Delusional disorder can be distinguished from schizophrenia and schizophreniform disorder by the absence of the other characteristic symptoms of the active phase of schizophrenia.

**Depressive and bipolar disorders and schizoaffective disorder.** These disorders may be distinguished from delusional disorder by the temporal relationship between the mood disturbance and the delusions and by the severity of the mood symptoms. If delusions occur exclusively during mood episodes, the diagnosis is depressive or bipolar disorder with psychotic features. Mood symptoms that meet full criteria for a mood episode can be superimposed on delusional disorder. Delusional disorder can be diagnosed only if the total duration of all mood episodes remains brief relative to the total duration of the delusional disturbance. If not, then a diagnosis of other specified or unspecified schizophrenia spectrum and other psychotic disorder accompanied by other specified depressive disorder, unspecified depressive disorder, other specified bipolar and related disorder, or unspecified bipolar and related disorder is appropriate.

nia; brief psychotic disorder; delusional disorder; other specified or unspecified schizophrenia spectrum and other psychotic disorder; schizotypal, schizoid, or paranoid personality disorders; autism spectrum disorder; disorders presenting in childhood with disorganized speech; attention-deficit/hyperactivity disorder; obsessive-compulsive disorder; posttraumatic stress disorder; and traumatic brain injury.

Since the diagnostic criteria for schizophreniform disorder and schizophrenia differ primarily in duration of illness, the discussion of the differential diagnosis of schizophrenia also applies to schizophreniform disorder.

**Brief psychotic disorder.** Schizophreniform disorder differs in duration from brief psychotic disorder, which has a duration of less than 1 month.

## Schizophrenia

### Diagnostic Criteria

**295.90 (F20.9)**

- A. Two (or more) of the following, each present for a significant portion of time during a 1-month period (or less if successfully treated). At least one of these must be (1), (2), or (3):
  1. Delusions.
  2. Hallucinations.
  3. Disorganized speech (e.g., frequent derailment or incoherence).
  4. Grossly disorganized or catatonic behavior.
  5. Negative symptoms (i.e., diminished emotional expression or avolition).
- B. For a significant portion of the time since the onset of the disturbance, level of functioning in one or more major areas, such as work, interpersonal relations, or self-care, is markedly below the level achieved prior to the onset (or when the onset is in childhood or adolescence, there is failure to achieve expected level of interpersonal, academic, or occupational functioning).
- C. Continuous signs of the disturbance persist for at least 6 months. This 6-month period must include at least 1 month of symptoms (or less if successfully treated) that meet Criterion A (i.e., active-phase symptoms) and may include periods of prodromal or residual symptoms. During these prodromal or residual periods, the signs of the disturbance may be manifested by only negative symptoms or by two or more symptoms listed in Criterion A present in an attenuated form (e.g., odd beliefs, unusual perceptual experiences).
- D. Schizoaffective disorder and depressive or bipolar disorder with psychotic features have been ruled out because either 1) no major depressive or manic episodes have occurred concurrently with the active-phase symptoms, or 2) if mood episodes have occurred during active-phase symptoms, they have been present for a minority of the total duration of the active and residual periods of the illness.
- E. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.
- F. If there is a history of autism spectrum disorder or a communication disorder of childhood onset, the additional diagnosis of schizophrenia is made only if prominent delusions or hallucinations, in addition to the other required symptoms of schizophrenia, are also present for at least 1 month (or less if successfully treated).

*Specify if:*

The following course specifiers are only to be used after a 1-year duration of the disorder and if they are not in contradiction to the diagnostic course criteria.

**First episode, currently in acute episode:** First manifestation of the disorder meeting the defining diagnostic symptom and time criteria. An *acute episode* is a time period in which the symptom criteria are fulfilled.



**First episode, currently in partial remission:** *Partial remission* is a period of time during which an improvement after a previous episode is maintained and in which the defining criteria of the disorder are only partially fulfilled.

**First episode, currently in full remission:** *Full remission* is a period of time after a previous episode during which no disorder-specific symptoms are present.

**Multiple episodes, currently in acute episode:** Multiple episodes may be determined after a minimum of two episodes (i.e., after a first episode, a remission and a minimum of one relapse).

**Multiple episodes, currently in partial remission**

**Multiple episodes, currently in full remission**

**Continuous:** Symptoms fulfilling the diagnostic symptom criteria of the disorder are remaining for the majority of the illness course, with subthreshold symptom periods being very brief relative to the overall course.

**Unspecified**

*Specify if:*

**With catatonia** (refer to the criteria for catatonia associated with another mental disorder, pp. 119–120, for definition).

**Coding note:** Use additional code 293.89 (F06.1) catatonia associated with schizophrenia to indicate the presence of the comorbid catatonia.

*Specify current severity:*

Severity is rated by a quantitative assessment of the primary symptoms of psychosis, including delusions, hallucinations, disorganized speech, abnormal psychomotor behavior, and negative symptoms. Each of these symptoms may be rated for its current severity (most severe in the last 7 days) on a 5-point scale ranging from 0 (not present) to 4 (present and severe). (See Clinician-Rated Dimensions of Psychosis Symptom Severity in the chapter “Assessment Measures.”)

**Note:** Diagnosis of schizophrenia can be made without using this severity specifier.

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## Diagnostic Features

The characteristic symptoms of schizophrenia involve a range of cognitive, behavioral, and emotional dysfunctions, but no single symptom is pathognomonic of the disorder. The diagnosis involves the recognition of a constellation of signs and symptoms associated with impaired occupational or social functioning. Individuals with the disorder will vary substantially on most features, as schizophrenia is a heterogeneous clinical syndrome.

At least two Criterion A symptoms must be present for a significant portion of time during a 1-month period or longer. At least one of these symptoms must be the clear presence of delusions (Criterion A1), hallucinations (Criterion A2), or disorganized speech (Criterion A3). Grossly disorganized or catatonic behavior (Criterion A4) and negative symptoms (Criterion A5) may also be present. In those situations in which the active-phase symptoms remit within a month in response to treatment, Criterion A is still met if the clinician estimates that they would have persisted in the absence of treatment.

Schizophrenia involves impairment in one or more major areas of functioning (Criterion B). If the disturbance begins in childhood or adolescence, the expected level of function is not attained. Comparing the individual with unaffected siblings may be helpful. The dysfunction persists for a substantial period during the course of the disorder and does not appear to be a direct result of any single feature. Avolition (i.e., reduced drive to pursue goal-directed behavior; Criterion A5) is linked to the social dysfunction described under Criterion B. There is also strong evidence for a relationship between cognitive impairment (see the section “Associated Features Supporting Diagnosis” for this disorder) and functional impairment in individuals with schizophrenia.

Some signs of the disturbance must persist for a continuous period of at least 6 months (Criterion C). Prodromal symptoms often precede the active phase, and residual symptoms may follow it, characterized by mild or subthreshold forms of hallucinations or delusions. Individuals may express a variety of unusual or odd beliefs that are not of delusional proportions (e.g., ideas of reference or magical thinking); they may have unusual perceptual experiences (e.g., sensing the presence of an unseen person); their speech may be generally understandable but vague; and their behavior may be unusual but not grossly disorganized (e.g., mumbling in public). Negative symptoms are common in the prodromal and residual phases and can be severe. Individuals who had been socially active may become withdrawn from previous routines. Such behaviors are often the first sign of a disorder.

Mood symptoms and full mood episodes are common in schizophrenia and may be concurrent with active-phase symptomatology. However, as distinct from a psychotic mood disorder, a schizophrenia diagnosis requires the presence of delusions or hallucinations in the absence of mood episodes. In addition, mood episodes, taken in total, should be present for only a minority of the total duration of the active and residual periods of the illness.

In addition to the five symptom domain areas identified in the diagnostic criteria, the assessment of cognition, depression, and mania symptom domains is vital for making critically important distinctions between the various schizophrenia spectrum and other psychotic disorders.

## Associated Features Supporting Diagnosis

Individuals with schizophrenia may display inappropriate affect (e.g., laughing in the absence of an appropriate stimulus); a dysphoric mood that can take the form of depression, anxiety, or anger; a disturbed sleep pattern (e.g., daytime sleeping and nighttime activity); and a lack of interest in eating or food refusal. Depersonalization, derealization, and somatic concerns may occur and sometimes reach delusional proportions. Anxiety and phobias are common. Cognitive deficits in schizophrenia are common and are strongly linked to vocational and functional impairments. These deficits can include decrements in declarative memory, working memory, language function, and other executive functions, as well as slower processing speed. Abnormalities in sensory processing and inhibitory capacity, as well as reductions in attention, are also found. Some individuals with schizophrenia show social cognition deficits, including deficits in the ability to infer the intentions of other people (theory of mind), and may attend to and then interpret irrelevant events or stimuli as meaningful, perhaps leading to the generation of explanatory delusions. These impairments frequently persist during symptomatic remission.

Some individuals with psychosis may lack insight or awareness of their disorder (i.e., anosognosia). This lack of “insight” includes unawareness of symptoms of schizophrenia and may be present throughout the entire course of the illness. Unawareness of illness is typically a symptom of schizophrenia itself rather than a coping strategy. It is comparable to the lack of awareness of neurological deficits following brain damage, termed *anosognosia*. This symptom is the most common predictor of non-adherence to treatment, and it predicts higher relapse rates, increased number of involuntary treatments, poorer psychosocial functioning, aggression, and a poorer course of illness.

Hostility and aggression can be associated with schizophrenia, although spontaneous or random assault is uncommon. Aggression is more frequent for younger males and for individuals with a past history of violence, non-adherence with treatment, substance abuse, and impulsivity. It should be noted that the vast majority of persons with schizophrenia are not aggressive and are more frequently victimized than are individuals in the general population.

Currently, there are no radiological, laboratory, or psychometric tests for the disorder. Differences are evident in multiple brain regions between groups of healthy individuals

and persons with schizophrenia, including evidence from neuroimaging, neuropathological, and neurophysiological studies. Differences are also evident in cellular architecture, white matter connectivity, and gray matter volume in a variety of regions such as the prefrontal and temporal cortices. Reduced overall brain volume has been observed, as well as increased brain volume reduction with age. Brain volume reductions with age are more pronounced in individuals with schizophrenia than in healthy individuals. Finally, individuals with schizophrenia appear to differ from individuals without the disorder in eye-tracking and electrophysiological indices.

Neurological soft signs common in individuals with schizophrenia include impairments in motor coordination, sensory integration, and motor sequencing of complex movements; left-right confusion; and disinhibition of associated movements. In addition, minor physical anomalies of the face and limbs may occur.

## Prevalence

The lifetime prevalence of schizophrenia appears to be approximately 0.3%–0.7%, although there is reported variation by race/ethnicity, across countries, and by geographic origin for immigrants and children of immigrants. The sex ratio differs across samples and populations: for example, an emphasis on negative symptoms and longer duration of disorder (associated with poorer outcome) shows higher incidence rates for males, whereas definitions allowing for the inclusion of more mood symptoms and brief presentations (associated with better outcome) show equivalent risks for both sexes.

## Development and Course

The psychotic features of schizophrenia typically emerge between the late teens and the mid-30s; onset prior to adolescence is rare. The peak age at onset for the first psychotic episode is in the early- to mid-20s for males and in the late-20s for females. The onset may be abrupt or insidious, but the majority of individuals manifest a slow and gradual development of a variety of clinically significant signs and symptoms. Half of these individuals complain of depressive symptoms. Earlier age at onset has traditionally been seen as a predictor of worse prognosis. However, the effect of age at onset is likely related to gender, with males having worse premorbid adjustment, lower educational achievement, more prominent negative symptoms and cognitive impairment, and in general a worse outcome. Impaired cognition is common, and alterations in cognition are present during development and precede the emergence of psychosis, taking the form of stable cognitive impairments during adulthood. Cognitive impairments may persist when other symptoms are in remission and contribute to the disability of the disease.

The predictors of course and outcome are largely unexplained, and course and outcome may not be reliably predicted. The course appears to be favorable in about 20% of those with schizophrenia, and a small number of individuals are reported to recover completely. However, most individuals with schizophrenia still require formal or informal daily living supports, and many remain chronically ill, with exacerbations and remissions of active symptoms, while others have a course of progressive deterioration.

Psychotic symptoms tend to diminish over the life course, perhaps in association with normal age-related declines in dopamine activity. Negative symptoms are more closely related to prognosis than are positive symptoms and tend to be the most persistent. Furthermore, cognitive deficits associated with the illness may not improve over the course of the illness.

The essential features of schizophrenia are the same in childhood, but it is more difficult to make the diagnosis. In children, delusions and hallucinations may be less elaborate than in adults, and visual hallucinations are more common and should be distinguished from normal fantasy play. Disorganized speech occurs in many disorders with childhood onset (e.g., autism spectrum disorder), as does disorganized behavior (e.g., attention-deficit/

hyperactivity disorder). These symptoms should not be attributed to schizophrenia without due consideration of the more common disorders of childhood. Childhood-onset cases tend to resemble poor-outcome adult cases, with gradual onset and prominent negative symptoms. Children who later receive the diagnosis of schizophrenia are more likely to have experienced nonspecific emotional-behavioral disturbances and psychopathology, intellectual and language alterations, and subtle motor delays.

Late-onset cases (i.e., onset after age 40 years) are overrepresented by females, who may have married. Often, the course is characterized by a predominance of psychotic symptoms with preservation of affect and social functioning. Such late-onset cases can still meet the diagnostic criteria for schizophrenia, but it is not yet clear whether this is the same condition as schizophrenia diagnosed prior to mid-life (e.g., prior to age 55 years).

## Risk and Prognostic Factors

**Environmental.** Season of birth has been linked to the incidence of schizophrenia, including late winter/early spring in some locations and summer for the deficit form of the disease. The incidence of schizophrenia and related disorders is higher for children growing up in an urban environment and for some minority ethnic groups.

**Genetic and physiological.** There is a strong contribution for genetic factors in determining risk for schizophrenia, although most individuals who have been diagnosed with schizophrenia have no family history of psychosis. Liability is conferred by a spectrum of risk alleles, common and rare, with each allele contributing only a small fraction to the total population variance. The risk alleles identified to date are also associated with other mental disorders, including bipolar disorder, depression, and autism spectrum disorder.

Pregnancy and birth complications with hypoxia and greater paternal age are associated with a higher risk of schizophrenia for the developing fetus. In addition, other prenatal and perinatal adversities, including stress, infection, malnutrition, maternal diabetes, and other medical conditions, have been linked with schizophrenia. However, the vast majority of offspring with these risk factors do not develop schizophrenia.

## Culture-Related Diagnostic Issues

Cultural and socioeconomic factors must be considered, particularly when the individual and the clinician do not share the same cultural and socioeconomic background. Ideas that appear to be delusional in one culture (e.g., witchcraft) may be commonly held in another. In some cultures, visual or auditory hallucinations with a religious content (e.g., hearing God's voice) are a normal part of religious experience. In addition, the assessment of disorganized speech may be made difficult by linguistic variation in narrative styles across cultures. The assessment of affect requires sensitivity to differences in styles of emotional expression, eye contact, and body language, which vary across cultures. If the assessment is conducted in a language that is different from the individual's primary language, care must be taken to ensure that alogia is not related to linguistic barriers. In certain cultures, distress may take the form of hallucinations or pseudo-hallucinations and overvalued ideas that may present clinically similar to true psychosis but are normative to the patient's subgroup.

## Gender-Related Diagnostic Issues

A number of features distinguish the clinical expression of schizophrenia in females and males. The general incidence of schizophrenia tends to be slightly lower in females, particularly among treated cases. The age at onset is later in females, with a second mid-life peak as described earlier (see the section "Development and Course" for this disorder). Symptoms tend to be more affect-laden among females, and there are more psychotic symptoms, as well as a greater propensity for psychotic symptoms to worsen in later life.

Other symptom differences include less frequent negative symptoms and disorganization. Finally, social functioning tends to remain better preserved in females. There are, however, frequent exceptions to these general caveats.

## Suicide Risk

Approximately 5%–6% of individuals with schizophrenia die by suicide, about 20% attempt suicide on one or more occasions, and many more have significant suicidal ideation. Suicidal behavior is sometimes in response to command hallucinations to harm oneself or others. Suicide risk remains high over the whole lifespan for males and females, although it may be especially high for younger males with comorbid substance use. Other risk factors include having depressive symptoms or feelings of hopelessness and being unemployed, and the risk is higher, also, in the period after a psychotic episode or hospital discharge.

## Functional Consequences of Schizophrenia

Schizophrenia is associated with significant social and occupational dysfunction. Making educational progress and maintaining employment are frequently impaired by avolition or other disorder manifestations, even when the cognitive skills are sufficient for the tasks at hand. Most individuals are employed at a lower level than their parents, and most, particularly men, do not marry or have limited social contacts outside of their family.

## Differential Diagnosis

**Major depressive or bipolar disorder with psychotic or catatonic features.** The distinction between schizophrenia and major depressive or bipolar disorder with psychotic features or with catatonia depends on the temporal relationship between the mood disturbance and the psychosis, and on the severity of the depressive or manic symptoms. If delusions or hallucinations occur exclusively during a major depressive or manic episode, the diagnosis is depressive or bipolar disorder with psychotic features.

**Schizoaffective disorder.** A diagnosis of schizoaffective disorder requires that a major depressive or manic episode occur concurrently with the active-phase symptoms and that the mood symptoms be present for a majority of the total duration of the active periods.

**Schizophreniform disorder and brief psychotic disorder.** These disorders are of shorter duration than schizophrenia as specified in Criterion C, which requires 6 months of symptoms. In schizophreniform disorder, the disturbance is present less than 6 months, and in brief psychotic disorder, symptoms are present at least 1 day but less than 1 month.

**Delusional disorder.** Delusional disorder can be distinguished from schizophrenia by the absence of the other symptoms characteristic of schizophrenia (e.g., delusions, prominent auditory or visual hallucinations, disorganized speech, grossly disorganized or catatonic behavior, negative symptoms).

**Schizotypal personality disorder.** Schizotypal personality disorder may be distinguished from schizophrenia by subthreshold symptoms that are associated with persistent personality features.

**Obsessive-compulsive disorder and body dysmorphic disorder.** Individuals with obsessive-compulsive disorder and body dysmorphic disorder may present with poor or absent insight, and the preoccupations may reach delusional proportions. But these disorders are distinguished from schizophrenia by their prominent obsessions, compulsions, preoccupations with appearance or body odor, hoarding, or body-focused repetitive behaviors.

**Posttraumatic stress disorder.** Posttraumatic stress disorder may include flashbacks that have a hallucinatory quality, and hypervigilance may reach paranoid proportions. But a trau-

matic event and characteristic symptom features relating to reliving or reacting to the event are required to make the diagnosis.

**Autism spectrum disorder or communication disorders.** These disorders may also have symptoms resembling a psychotic episode but are distinguished by their respective deficits in social interaction with repetitive and restricted behaviors and other cognitive and communication deficits. An individual with autism spectrum disorder or communication disorder must have symptoms that meet full criteria for schizophrenia, with prominent hallucinations or delusions for at least 1 month, in order to be diagnosed with schizophrenia as a comorbid condition.

**Other mental disorders associated with a psychotic episode.** The diagnosis of schizophrenia is made only when the psychotic episode is persistent and not attributable to the physiological effects of a substance or another medical condition. Individuals with a delirium or major or minor neurocognitive disorder may present with psychotic symptoms, but these would have a temporal relationship to the onset of cognitive changes consistent with those disorders. Individuals with substance/medication-induced psychotic disorder may present with symptoms characteristic of Criterion A for schizophrenia, but the substance/medication-induced psychotic disorder can usually be distinguished by the chronological relationship of substance use to the onset and remission of the psychosis in the absence of substance use.

## Comorbidity

Rates of comorbidity with substance-related disorders are high in schizophrenia. Over half of individuals with schizophrenia have tobacco use disorder and smoke cigarettes regularly. Comorbidity with anxiety disorders is increasingly recognized in schizophrenia. Rates of obsessive-compulsive disorder and panic disorder are elevated in individuals with schizophrenia compared with the general population. Schizotypal or paranoid personality disorder may sometimes precede the onset of schizophrenia.

Life expectancy is reduced in individuals with schizophrenia because of associated medical conditions. Weight gain, diabetes, metabolic syndrome, and cardiovascular and pulmonary disease are more common in schizophrenia than in the general population. Poor engagement in health maintenance behaviors (e.g., cancer screening, exercise) increases the risk of chronic disease, but other disorder factors, including medications, lifestyle, cigarette smoking, and diet, may also play a role. A shared vulnerability for psychosis and medical disorders may explain some of the medical comorbidity of schizophrenia.

# Schizoaffective Disorder

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## Diagnostic Criteria

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- A. An uninterrupted period of illness during which there is a major mood episode (major depressive or manic) concurrent with Criterion A of schizophrenia.  
**Note:** The major depressive episode must include Criterion A1: Depressed mood.
- B. Delusions or hallucinations for 2 or more weeks in the absence of a major mood episode (depressive or manic) during the lifetime duration of the illness.
- C. Symptoms that meet criteria for a major mood episode are present for the majority of the total duration of the active and residual portions of the illness.
- D. The disturbance is not attributable to the effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.

# Bipolar and Related Disorders

Bipolar and related disorders are separated from the depressive disorders in DSM-5 and placed between the chapters on schizophrenia spectrum and other psychotic disorders and depressive disorders in recognition of their place as a bridge between the two diagnostic classes in terms of symptomatology, family history, and genetics. The diagnoses included in this chapter are bipolar I disorder, bipolar II disorder, cyclothymic disorder, substance/medication-induced bipolar and related disorder, bipolar and related disorder due to another medical condition, other specified bipolar and related disorder, and unspecified bipolar and related disorder.

The bipolar I disorder criteria represent the modern understanding of the classic manic-depressive disorder or affective psychosis described in the nineteenth century, differing from that classic description only to the extent that neither psychosis nor the lifetime experience of a major depressive episode is a requirement. However, the vast majority of individuals whose symptoms meet the criteria for a fully syndromal manic episode also experience major depressive episodes during the course of their lives.

Bipolar II disorder, requiring the lifetime experience of at least one episode of major depression and at least one hypomanic episode, is no longer thought to be a “milder” condition than bipolar I disorder, largely because of the amount of time individuals with this condition spend in depression and because the instability of mood experienced by individuals with bipolar II disorder is typically accompanied by serious impairment in work and social functioning.

The diagnosis of cyclothymic disorder is given to adults who experience at least 2 years (for children, a full year) of both hypomanic and depressive periods without ever fulfilling the criteria for an episode of mania, hypomania, or major depression.

A large number of substances of abuse, some prescribed medications, and several medical conditions can be associated with manic-like phenomena. This fact is recognized in the diagnoses of substance/medication-induced bipolar and related disorder and bipolar and related disorder due to another medical condition.

The recognition that many individuals, particularly children and, to a lesser extent, adolescents, experience bipolar-like phenomena that do not meet the criteria for bipolar I, bipolar II, or cyclothymic disorder is reflected in the availability of the other specified bipolar and related disorder category. Indeed, specific criteria for a disorder involving short-duration hypomania are provided in Section III in the hope of encouraging further study of this disorder.

## Bipolar I Disorder

### Diagnostic Criteria

For a diagnosis of bipolar I disorder, it is necessary to meet the following criteria for a manic episode. The manic episode may have been preceded by and may be followed by hypomanic or major depressive episodes.

### Manic Episode

- A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased goal-directed activity or energy, lasting at least 1 week and present most of the day, nearly every day (or any duration if hospitalization is necessary).
- B. During the period of mood disturbance and increased energy or activity, three (or more) of the following symptoms (four if the mood is only irritable) are present to a significant degree and represent a noticeable change from usual behavior:
  - 1. Inflated self-esteem or grandiosity.
  - 2. Decreased need for sleep (e.g., feels rested after only 3 hours of sleep).
  - 3. More talkative than usual or pressure to keep talking.
  - 4. Flight of ideas or subjective experience that thoughts are racing.
  - 5. Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli), as reported or observed.
  - 6. Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation (i.e., purposeless non-goal-directed activity).
  - 7. Excessive involvement in activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments).
- C. The mood disturbance is sufficiently severe to cause marked impairment in social or occupational functioning or to necessitate hospitalization to prevent harm to self or others, or there are psychotic features.
- D. The episode is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication, other treatment) or to another medical condition.

**Note:** A full manic episode that emerges during antidepressant treatment (e.g., medication, electroconvulsive therapy) but persists at a fully syndromal level beyond the physiological effect of that treatment is sufficient evidence for a manic episode and, therefore, a bipolar I diagnosis.

**Note:** Criteria A–D constitute a manic episode. At least one lifetime manic episode is required for the diagnosis of bipolar I disorder.

### Hypomanic Episode

- A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased activity or energy, lasting at least 4 consecutive days and present most of the day, nearly every day.
- B. During the period of mood disturbance and increased energy and activity, three (or more) of the following symptoms (four if the mood is only irritable) have persisted, represent a noticeable change from usual behavior, and have been present to a significant degree:
  - 1. Inflated self-esteem or grandiosity.
  - 2. Decreased need for sleep (e.g., feels rested after only 3 hours of sleep).
  - 3. More talkative than usual or pressure to keep talking.
  - 4. Flight of ideas or subjective experience that thoughts are racing.
  - 5. Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli), as reported or observed.
  - 6. Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation.
  - 7. Excessive involvement in activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments).



- C. The episode is associated with an unequivocal change in functioning that is uncharacteristic of the individual when not symptomatic.
- D. The disturbance in mood and the change in functioning are observable by others.
- E. The episode is not severe enough to cause marked impairment in social or occupational functioning or to necessitate hospitalization. If there are psychotic features, the episode is, by definition, manic.
- F. The episode is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication, other treatment).

**Note:** A full hypomanic episode that emerges during antidepressant treatment (e.g., medication, electroconvulsive therapy) but persists at a fully syndromal level beyond the physiological effect of that treatment is sufficient evidence for a hypomanic episode diagnosis. However, caution is indicated so that one or two symptoms (particularly increased irritability, edginess, or agitation following antidepressant use) are not taken as sufficient for diagnosis of a hypomanic episode, nor necessarily indicative of a bipolar diathesis.

**Note:** Criteria A–F constitute a hypomanic episode. Hypomanic episodes are common in bipolar I disorder but are not required for the diagnosis of bipolar I disorder.

### Major Depressive Episode

- A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

**Note:** Do not include symptoms that are clearly attributable to another medical condition.

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, or hopeless) or observation made by others (e.g., appears tearful). (**Note:** In children and adolescents, can be irritable mood.)
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).
3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (**Note:** In children, consider failure to make expected weight gain.)
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day (observable by others; not merely subjective feelings of restlessness or being slowed down).
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

- B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- C. The episode is not attributable to the physiological effects of a substance or another medical condition.

**Note:** Criteria A–C constitute a major depressive episode. Major depressive episodes are common in bipolar I disorder but are not required for the diagnosis of bipolar I disorder.

**Note:** Responses to a significant loss (e.g., bereavement, financial ruin, losses from a natural disaster, a serious medical illness or disability) may include the feelings of intense

sadness, rumination about the loss, insomnia, poor appetite, and weight loss noted in Criterion A, which may resemble a depressive episode. Although such symptoms may be understandable or considered appropriate to the loss, the presence of a major depressive episode in addition to the normal response to a significant loss should also be carefully considered. This decision inevitably requires the exercise of clinical judgment based on the individual's history and the cultural norms for the expression of distress in the context of loss.<sup>1</sup>

**Bipolar I Disorder**

- A. Criteria have been met for at least one manic episode (Criteria A–D under “Manic Episode” above).
- B. The occurrence of the manic and major depressive episode(s) is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified or unspecified schizophrenia spectrum and other psychotic disorder.

**Coding and Recording Procedures**

The diagnostic code for bipolar I disorder is based on type of current or most recent episode and its status with respect to current severity, presence of psychotic features, and remission status. Current severity and psychotic features are only indicated if full criteria are currently met for a manic or major depressive episode. Remission specifiers are only indicated if the full criteria are not currently met for a manic, hypomanic, or major depressive episode. Codes are as follows:

Bipolar I disorder	Current or most recent episode manic	Current or most recent episode hypomanic*	Current or most recent episode depressed	Current or most recent episode unspecified**
Mild (p. 154)	296.41 (F31.11)	NA	296.51 (F31.31)	NA
Moderate (p. 154)	296.42 (F31.12)	NA	296.52 (F31.32)	NA
Severe (p. 154)	296.43 (F31.13)	NA	296.53 (F31.4)	NA

<sup>1</sup>In distinguishing grief from a major depressive episode (MDE), it is useful to consider that in grief the predominant affect is feelings of emptiness and loss, while in MDE it is persistent depressed mood and the inability to anticipate happiness or pleasure. The dysphoria in grief is likely to decrease in intensity over days to weeks and occurs in waves, the so-called pangs of grief. These waves tend to be associated with thoughts or reminders of the deceased. The depressed mood of a MDE is more persistent and not tied to specific thoughts or preoccupations. The pain of grief may be accompanied by positive emotions and humor that are uncharacteristic of the pervasive unhappiness and misery characteristic of a major depressive episode. The thought content associated with grief generally features a preoccupation with thoughts and memories of the deceased, rather than the self-critical or pessimistic ruminations seen in a MDE. In grief, self-esteem is generally preserved, whereas in a MDE, feelings of worthlessness and self-loathing are common. If self-derogatory ideation is present in grief, it typically involves perceived failings vis-à-vis the deceased (e.g., not visiting frequently enough, not telling the deceased how much he or she was loved). If a bereaved individual thinks about death and dying, such thoughts are generally focused on the deceased and possibly about “joining” the deceased, whereas in a major depressive episode such thoughts are focused on ending one’s own life because of feeling worthless, undeserving of life, or unable to cope with the pain of depression.

Bipolar I disorder	Current or most recent episode manic	Current or most recent episode hypomanic*	Current or most recent episode depressed	Current or most recent episode unspecified**
With psychotic features*** (p. 152)	296.44 (F31.2)	NA	296.54 (F31.5)	NA
In partial remission (p. 154)	296.45 (F31.73)	296.45 (F31.73)	296.55 (F31.75)	NA
In full remission (p. 154)	296.46 (F31.74)	296.46 (F31.74)	296.56 (F31.76)	NA
Unspecified	296.40 (F31.9)	296.40 (F31.9)	296.50 (F31.9)	NA

\*Severity and psychotic specifiers do not apply; code 296.40 (F31.0) for cases not in remission.

\*\*Severity, psychotic, and remission specifiers do not apply. Code 296.7 (F31.9).

\*\*\*If psychotic features are present, code the "with psychotic features" specifier irrespective of episode severity.

In recording the name of a diagnosis, terms should be listed in the following order: bipolar I disorder, type of current or most recent episode, severity/psychotic/remission specifiers, followed by as many specifiers without codes as apply to the current or most recent episode.

*Specify:*

**With anxious distress** (p. 149)

**With mixed features** (pp. 149–150)

**With rapid cycling** (pp. 150–151)

**With melancholic features** (p. 151)

**With atypical features** (pp. 151–152)

**With mood-congruent psychotic features** (p. 152)

**With mood-incongruent psychotic features** (p. 152)

**With catatonia** (p. 152). **Coding note:** Use additional code 293.89 (F06.1).

**With peripartum onset** (pp. 152–153)

**With seasonal pattern** (pp. 153–154)

## Diagnostic Features

The essential feature of a manic episode is a distinct period during which there is an abnormally, persistently elevated, expansive, or irritable mood and persistently increased activity or energy that is present for most of the day, nearly every day, for a period of at least 1 week (or any duration if hospitalization is necessary), accompanied by at least three additional symptoms from Criterion B. If the mood is irritable rather than elevated or expansive, at least four Criterion B symptoms must be present.

Mood in a manic episode is often described as euphoric, excessively cheerful, high, or "feeling on top of the world." In some cases, the mood is of such a highly infectious quality that it is easily recognized as excessive and may be characterized by unlimited and hap-hazard enthusiasm for interpersonal, sexual, or occupational interactions. For example, the individual may spontaneously start extensive conversations with strangers in public. Often the predominant mood is irritable rather than elevated, particularly when the individual's wishes are denied or if the individual has been using substances. Rapid shifts in mood over brief periods of time may occur and are referred to as lability (i.e., the alterna-

tion among euphoria, dysphoria, and irritability). In children, happiness, silliness and "goofiness" are normal in the context of special occasions; however, if these symptoms are recurrent, inappropriate to the context, and beyond what is expected for the developmental level of the child, they may meet Criterion A. If the happiness is unusual for a child (i.e., distinct from baseline), and the mood change occurs at the same time as symptoms that meet Criterion B for mania, diagnostic certainty is increased; however, the mood change must be accompanied by persistently increased activity or energy levels that are obvious to those who know the child well.

During the manic episode, the individual may engage in multiple overlapping new projects. The projects are often initiated with little knowledge of the topic, and nothing seems out of the individual's reach. The increased activity levels may manifest at unusual hours of the day.

Inflated self-esteem is typically present, ranging from uncritical self-confidence to marked grandiosity, and may reach delusional proportions (Criterion B1). Despite lack of any particular experience or talent, the individual may embark on complex tasks such as writing a novel or seeking publicity for some impractical invention. Grandiose delusions (e.g., of having a special relationship to a famous person) are common. In children, overestimation of abilities and belief that, for example, they are the best at a sport or the smartest in the class is normal; however, when such beliefs are present despite clear evidence to the contrary or the child attempts feats that are clearly dangerous and, most important, represent a change from the child's normal behavior, the grandiosity criterion should be considered satisfied.

One of the most common features is a decreased need for sleep (Criterion B2) and is distinct from insomnia in which the individual wants to sleep or feels the need to sleep but is unable. The individual may sleep little, if at all, or may awaken several hours earlier than usual, feeling rested and full of energy. When the sleep disturbance is severe, the individual may go for days without sleep, yet not feel tired. Often a decreased need for sleep heralds the onset of a manic episode.

Speech can be rapid, pressured, loud, and difficult to interrupt (Criterion B3). Individuals may talk continuously and without regard for others' wishes to communicate, often in an intrusive manner or without concern for the relevance of what is said. Speech is sometimes characterized by jokes, puns, amusing irrelevancies, and theatricality, with dramatic mannerisms, singing, and excessive gesturing. Loudness and forcefulness of speech often become more important than what is conveyed. If the individual's mood is more irritable than expansive, speech may be marked by complaints, hostile comments, or angry tirades, particularly if attempts are made to interrupt the individual. Both Criterion A and Criterion B symptoms may be accompanied by symptoms of the opposite (i.e., depressive) pole (see "with mixed features" specifier, pp. 149–150).

Often the individual's thoughts race at a rate faster than they can be expressed through speech (Criterion B4). Frequently there is flight of ideas evidenced by a nearly continuous flow of accelerated speech, with abrupt shifts from one topic to another. When flight of ideas is severe, speech may become disorganized, incoherent, and particularly distressful to the individual. Sometimes thoughts are experienced as so crowded that it is very difficult to speak.

Distractibility (Criterion B5) is evidenced by an inability to censor immaterial external stimuli (e.g., the interviewer's attire, background noises or conversations, furnishings in the room) and often prevents individuals experiencing mania from holding a rational conversation or attending to instructions.

The increase in goal-directed activity often consists of excessive planning and participation in multiple activities, including sexual, occupational, political, or religious activities. Increased sexual drive, fantasies, and behavior are often present. Individuals in a manic episode usually show increased sociability (e.g., renewing old acquaintances or calling or contacting friends or even strangers), without regard to the intrusive, domineering, and demanding nature of these interactions. They often display psychomotor agitation or restlessness (i.e., purposeless activity) by pacing or by holding multiple conversations simulta-

neously. Some individuals write excessive letters, e-mails, text messages, and so forth, on many different topics to friends, public figures, or the media.

The increased activity criterion can be difficult to ascertain in children; however, when the child takes on many tasks simultaneously, starts devising elaborate and unrealistic plans for projects, develops previously absent and developmentally inappropriate sexual preoccupations (not accounted for by sexual abuse or exposure to sexually explicit material), then Criterion B might be met based on clinical judgment. It is essential to determine whether the behavior represents a change from the child's baseline behavior; occurs most of the day, nearly every day for the requisite time period; and occurs in temporal association with other symptoms of mania.

The expansive mood, excessive optimism, grandiosity, and poor judgment often lead to reckless involvement in activities such as spending sprees, giving away possessions, reckless driving, foolish business investments, and sexual promiscuity that is unusual for the individual, even though these activities are likely to have catastrophic consequences (Criterion B7). The individual may purchase many unneeded items without the money to pay for them and, in some cases, give them away. Sexual behavior may include infidelity or indiscriminate sexual encounters with strangers, often disregarding the risk of sexually transmitted diseases or interpersonal consequences.

The manic episode must result in marked impairment in social or occupational functioning or require hospitalization to prevent harm to self or others (e.g., financial losses, illegal activities, loss of employment, self-injurious behavior). By definition, the presence of psychotic features during a manic episode also satisfies Criterion C.

Manic symptoms or syndromes that are attributable to the physiological effects of a drug of abuse (e.g., in the context of cocaine or amphetamine intoxication), the side effects of medications or treatments (e.g., steroids, L-dopa, antidepressants, stimulants), or another medical condition do not count toward the diagnosis of bipolar I disorder. However, a fully syndromal manic episode that arises during treatment (e.g., with medications, electroconvulsive therapy, light therapy) or drug use and persists beyond the physiological effect of the inducing agent (i.e., after a medication is fully out of the individual's system or the effects of electroconvulsive therapy would be expected to have dissipated completely) is sufficient evidence for a manic episode diagnosis (Criterion D). Caution is indicated so that one or two symptoms (particularly increased irritability, edginess, or agitation following antidepressant use) are not taken as sufficient for diagnosis of a manic or hypomanic episode, nor necessarily an indication of a bipolar disorder diathesis. It is necessary to meet criteria for a manic episode to make a diagnosis of bipolar I disorder, but it is not required to have hypomanic or major depressive episodes. However, they may precede or follow a manic episode. Full descriptions of the diagnostic features of a hypomanic episode may be found within the text for bipolar II disorder, and the features of a major depressive episode are described within the text for major depressive disorder.

## **Associated Features Supporting Diagnosis**

During a manic episode, individuals often do not perceive that they are ill or in need of treatment and vehemently resist efforts to be treated. Individuals may change their dress, makeup, or personal appearance to a more sexually suggestive or flamboyant style. Some perceive a sharper sense of smell, hearing, or vision. Gambling and antisocial behaviors may accompany the manic episode. Some individuals may become hostile and physically threatening to others and, when delusional, may become physically assaultive or suicidal. Catastrophic consequences of a manic episode (e.g., involuntary hospitalization, difficulties with the law, serious financial difficulties) often result from poor judgment, loss of insight, and hyperactivity.

Mood may shift very rapidly to anger or depression. Depressive symptoms may occur during a manic episode and, if present, may last moments, hours, or, more rarely, days (see "with mixed features" specifier, pp. 149–150).

## Prevalence

The 12-month prevalence estimate in the continental United States was 0.6% for bipolar I disorder as defined in DSM-IV. Twelve-month prevalence of bipolar I disorder across 11 countries ranged from 0.0% to 0.6%. The lifetime male-to-female prevalence ratio is approximately 1.1:1.

## Development and Course

Mean age at onset of the first manic, hypomanic, or major depressive episode is approximately 18 years for bipolar I disorder. Special considerations are necessary to detect the diagnosis in children. Since children of the same chronological age may be at different developmental stages, it is difficult to define with precision what is “normal” or “expected” at any given point. Therefore, each child should be judged according to his or her own baseline. Onset occurs throughout the life cycle, including first onsets in the 60s or 70s. Onset of manic symptoms (e.g., sexual or social disinhibition) in late mid-life or late-life should prompt consideration of medical conditions (e.g., frontotemporal neurocognitive disorder) and of substance ingestion or withdrawal.

More than 90% of individuals who have a single manic episode go on to have recurrent mood episodes. Approximately 60% of manic episodes occur immediately before a major depressive episode. Individuals with bipolar I disorder who have multiple (four or more) mood episodes (major depressive, manic, or hypomanic) within 1 year receive the specifier “with rapid cycling.”

## Risk and Prognostic Factors

**Environmental.** Bipolar disorder is more common in high-income than in low-income countries (1.4 vs. 0.7%). Separated, divorced, or widowed individuals have higher rates of bipolar I disorder than do individuals who are married or have never been married, but the direction of the association is unclear.

**Genetic and physiological.** A family history of bipolar disorder is one of the strongest and most consistent risk factors for bipolar disorders. There is an average 10-fold increased risk among adult relatives of individuals with bipolar I and bipolar II disorders. Magnitude of risk increases with degree of kinship. Schizophrenia and bipolar disorder likely share a genetic origin, reflected in familial co-aggregation of schizophrenia and bipolar disorder.

**Course modifiers.** After an individual has a manic episode with psychotic features, subsequent manic episodes are more likely to include psychotic features. Incomplete inter-episode recovery is more common when the current episode is accompanied by mood-incongruent psychotic features.

## Culture-Related Diagnostic Issues

Little information exists on specific cultural differences in the expression of bipolar I disorder. One possible explanation for this may be that diagnostic instruments are often translated and applied in different cultures with no transcultural validation. In one U.S. study, 12-month prevalence of bipolar I disorder was significantly lower for Afro-Caribbeans than for African Americans or whites.

## Gender-Related Diagnostic Issues

Females are more likely to experience rapid cycling and mixed states, and to have patterns of comorbidity that differ from those of males, including higher rates of lifetime eating disorders. Females with bipolar I or II disorder are more likely to experience depressive symptoms than males. They also have a higher lifetime risk of alcohol use disorder than are males and a much greater likelihood of alcohol use disorder than do females in the general population.

## Suicide Risk

The lifetime risk of suicide in individuals with bipolar disorder is estimated to be at least 15 times that of the general population. In fact, bipolar disorder may account for one-quarter of all completed suicides. A past history of suicide attempt and percent days spent depressed in the past year are associated with greater risk of suicide attempts or completions.

## Functional Consequences of Bipolar I Disorder

Although many individuals with bipolar disorder return to a fully functional level between episodes, approximately 30% show severe impairment in work role function. Functional recovery lags substantially behind recovery from symptoms, especially with respect to occupational recovery, resulting in lower socioeconomic status despite equivalent levels of education when compared with the general population. Individuals with bipolar I disorder perform more poorly than healthy individuals on cognitive tests. Cognitive impairments may contribute to vocational and interpersonal difficulties and persist through the lifespan, even during euthymic periods.

## Differential Diagnosis

**Major depressive disorder.** Major depressive disorder may also be accompanied by hypomanic or manic symptoms (i.e., fewer symptoms or for a shorter duration than required for mania or hypomania). When the individual presents in an episode of major depression, one must depend on corroborating history regarding past episodes of mania or hypomania. Symptoms of irritability may be associated with either major depressive disorder or bipolar disorder, adding to diagnostic complexity.

**Other bipolar disorders.** Diagnosis of bipolar I disorder is differentiated from bipolar II disorder by determining whether there have been any past episodes of mania. Other specified and unspecified bipolar and related disorders should be differentiated from bipolar I and II disorders by considering whether either the episodes involving manic or hypomanic symptoms or the episodes of depressive symptoms fail to meet the full criteria for those conditions.

Bipolar disorder due to another medical condition may be distinguished from bipolar I and II disorders by identifying, based on best clinical evidence, a causally related medical condition.

**Generalized anxiety disorder, panic disorder, posttraumatic stress disorder, or other anxiety disorders.** These disorders need to be considered in the differential diagnosis as either the primary disorder or, in some cases, a comorbid disorder. A careful history of symptoms is needed to differentiate generalized anxiety disorder from bipolar disorder, as anxious ruminations may be mistaken for racing thoughts, and efforts to minimize anxious feelings may be taken as impulsive behavior. Similarly, symptoms of posttraumatic stress disorder need to be differentiated from bipolar disorder. It is helpful to assess the episodic nature of the symptoms described, as well as to consider symptom triggers, in making this differential diagnosis.

**Substance/medication-induced bipolar disorder.** Substance use disorders may manifest with substance/medication-induced manic symptoms that must be distinguished from bipolar I disorder; response to mood stabilizers during a substance/medication-induced mania may not necessarily be diagnostic for bipolar disorder. There may be substantial overlap in view of the tendency for individuals with bipolar I disorder to overuse substances during an episode. A primary diagnosis of bipolar disorder must be established based on symptoms that remain once substances are no longer being used.

**Attention-deficit/hyperactivity disorder.** This disorder may be misdiagnosed as bipolar disorder, especially in adolescents and children. Many symptoms overlap with the symp-

toms of mania, such as rapid speech, racing thoughts, distractibility, and less need for sleep. The “double counting” of symptoms toward both ADHD and bipolar disorder can be avoided if the clinician clarifies whether the symptom(s) represents a distinct episode.

**Personality disorders.** Personality disorders such as borderline personality disorder may have substantial symptomatic overlap with bipolar disorders, since mood lability and impulsivity are common in both conditions. Symptoms must represent a distinct episode, and the noticeable increase over baseline required for the diagnosis of bipolar disorder must be present. A diagnosis of a personality disorder should not be made during an untreated mood episode.

**Disorders with prominent irritability.** In individuals with severe irritability, particularly children and adolescents, care must be taken to apply the diagnosis of bipolar disorder only to those who have had a clear episode of mania or hypomania—that is, a distinct time period, of the required duration, during which the irritability was clearly different from the individual’s baseline and was accompanied by the onset of Criterion B symptoms. When a child’s irritability is persistent and particularly severe, the diagnosis of disruptive mood dysregulation disorder would be more appropriate. Indeed, when any child is being assessed for mania, it is essential that the symptoms represent a clear change from the child’s typical behavior.

## Comorbidity

Co-occurring mental disorders are common, with the most frequent disorders being any anxiety disorder (e.g., panic attacks, social anxiety disorder [social phobia], specific phobia), occurring in approximately three-fourths of individuals; ADHD, any disruptive, impulse-control, or conduct disorder (e.g., intermittent explosive disorder, oppositional defiant disorder, conduct disorder), and any substance use disorder (e.g., alcohol use disorder) occur in over half of individuals with bipolar I disorder. Adults with bipolar I disorder have high rates of serious and/or untreated co-occurring medical conditions. Metabolic syndrome and migraine are more common among individuals with bipolar disorder than in the general population. More than half of individuals whose symptoms meet criteria for bipolar disorder have an alcohol use disorder, and those with both disorders are at greater risk for suicide attempt.

## Bipolar II Disorder

### Diagnostic Criteria

**296.89 (F31.81)**

For a diagnosis of bipolar II disorder, it is necessary to meet the following criteria for a current or past hypomanic episode *and* the following criteria for a current or past major depressive episode:

### Hypomanic Episode

- A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased activity or energy, lasting at least 4 consecutive days and present most of the day, nearly every day.
- B. During the period of mood disturbance and increased energy and activity, three (or more) of the following symptoms have persisted (four if the mood is only irritable), represent a noticeable change from usual behavior, and have been present to a significant degree:
  1. Inflated self-esteem or grandiosity.
  2. Decreased need for sleep (e.g., feels rested after only 3 hours of sleep).
  3. More talkative than usual or pressure to keep talking.



4. Flight of ideas or subjective experience that thoughts are racing.
  5. Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli), as reported or observed.
  6. Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation.
  7. Excessive involvement in activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments).
- C. The episode is associated with an unequivocal change in functioning that is uncharacteristic of the individual when not symptomatic.
  - D. The disturbance in mood and the change in functioning are observable by others.
  - E. The episode is not severe enough to cause marked impairment in social or occupational functioning or to necessitate hospitalization. If there are psychotic features, the episode is, by definition, manic.
  - F. The episode is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication or other treatment).

**Note:** A full hypomanic episode that emerges during antidepressant treatment (e.g., medication, electroconvulsive therapy) but persists at a fully syndromal level beyond the physiological effect of that treatment is sufficient evidence for a hypomanic episode diagnosis. However, caution is indicated so that one or two symptoms (particularly increased irritability, edginess, or agitation following antidepressant use) are not taken as sufficient for diagnosis of a hypomanic episode, nor necessarily indicative of a bipolar diathesis.

### Major Depressive Episode

- A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.
- Note:** Do not include symptoms that are clearly attributable to a medical condition.
1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, or hopeless) or observation made by others (e.g., appears tearful). (**Note:** In children and adolescents, can be irritable mood.)
  2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).
  3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (**Note:** In children, consider failure to make expected weight gain.)
  4. Insomnia or hypersomnia nearly every day.
  5. Psychomotor agitation or retardation nearly every day (observable by others; not merely subjective feelings of restlessness or being slowed down).
  6. Fatigue or loss of energy nearly every day.
  7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
  8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
  9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, a suicide attempt, or a specific plan for committing suicide.
- B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
  - C. The episode is not attributable to the physiological effects of a substance or another medical condition.

**Note:** Criteria A–C above constitute a major depressive episode.

**Note:** Responses to a significant loss (e.g., bereavement, financial ruin, losses from a natural disaster, a serious medical illness or disability) may include the feelings of intense sadness, rumination about the loss, insomnia, poor appetite, and weight loss noted in Criterion A, which may resemble a depressive episode. Although such symptoms may be understandable or considered appropriate to the loss, the presence of a major depressive episode in addition to the normal response to a significant loss should be carefully considered. This decision inevitably requires the exercise of clinical judgment based on the individual's history and the cultural norms for the expression of distress in the context of loss.<sup>1</sup>

## Bipolar II Disorder

- A. Criteria have been met for at least one hypomanic episode (Criteria A–F under “Hypomanic Episode” above) and at least one major depressive episode (Criteria A–C under “Major Depressive Episode” above).
- B. There has never been a manic episode.
- C. The occurrence of the hypomanic episode(s) and major depressive episode(s) is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified or unspecified schizophrenia spectrum and other psychotic disorder.
- D. The symptoms of depression or the unpredictability caused by frequent alternation between periods of depression and hypomania causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

## Coding and Recording Procedures

Bipolar II disorder has one diagnostic code: 296.89 (F31.81). Its status with respect to current severity, presence of psychotic features, course, and other specifiers cannot be coded but should be indicated in writing (e.g., 296.89 [F31.81] bipolar II disorder, current episode depressed, moderate severity, with mixed features; 296.89 [F31.81] bipolar II disorder, most recent episode depressed, in partial remission).

*Specify* current or most recent episode:

**Hypomanic**  
**Depressed**

*Specify* if:

**With anxious distress** (p. 149)

**With mixed features** (pp. 149–150)

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<sup>1</sup> In distinguishing grief from a major depressive episode (MDE), it is useful to consider that in grief the predominant affect is feelings of emptiness and loss, while in a MDE it is persistent depressed mood and the inability to anticipate happiness or pleasure. The dysphoria in grief is likely to decrease in intensity over days to weeks and occurs in waves, the so-called pangs of grief. These waves tend to be associated with thoughts or reminders of the deceased. The depressed mood of a MDE is more persistent and not tied to specific thoughts or preoccupations. The pain of grief may be accompanied by positive emotions and humor that are uncharacteristic of the pervasive unhappiness and misery characteristic of a MDE. The thought content associated with grief generally features a preoccupation with thoughts and memories of the deceased, rather than the self-critical or pessimistic ruminations seen in a MDE. In grief, self-esteem is generally preserved, whereas in a MDE feelings of worthlessness and self-loathing are common. If self-derogatory ideation is present in grief, it typically involves perceived failings vis-à-vis the deceased (e.g., not visiting frequently enough, not telling the deceased how much he or she was loved). If a bereaved individual thinks about death and dying, such thoughts are generally focused on the deceased and possibly about “joining” the deceased, whereas in a MDE such thoughts are focused on ending one's own life because of feeling worthless, undeserving of life, or unable to cope with the pain of depression.

**With rapid cycling** (pp. 150–151)

**With mood-congruent psychotic features** (p. 152)

**With mood-incongruent psychotic features** (p. 152)

**With catatonia** (p. 152). **Coding note:** Use additional code 293.89 (F06.1).

**With peripartum onset** (pp. 152–153)

**With seasonal pattern** (pp. 153–154): Applies only to the pattern of major depressive episodes.

*Specify* course if full criteria for a mood episode are not currently met:

**In partial remission** (p. 154)

**In full remission** (p. 154)

*Specify* severity if full criteria for a mood episode are currently met:

**Mild** (p. 154)

**Moderate** (p. 154)

**Severe** (p. 154)

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## Diagnostic Features

Bipolar II disorder is characterized by a clinical course of recurring mood episodes consisting of one or more major depressive episodes (Criteria A–C under “Major Depressive Episode”) and at least one hypomanic episode (Criteria A–F under “Hypomanic Episode”). The major depressive episode must last at least 2 weeks, and the hypomanic episode must last at least 4 days, to meet the diagnostic criteria. During the mood episode(s), the requisite number of symptoms must be present most of the day, nearly every day, and represent a noticeable change from usual behavior and functioning. The presence of a manic episode during the course of illness precludes the diagnosis of bipolar II disorder (Criterion B under “Bipolar II Disorder”). Episodes of substance/medication-induced depressive disorder or substance/medication-induced bipolar and related disorder (representing the physiological effects of a medication, other somatic treatments for depression, drugs of abuse, or toxin exposure) or of depressive and related disorder due to another medical condition or bipolar and related disorder due to another medical condition do not count toward a diagnosis of bipolar II disorder unless they persist beyond the physiological effects of the treatment or substance and then meet duration criteria for an episode. In addition, the episodes must not be better accounted for by schizoaffective disorder and are not superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or other specified or unspecified schizophrenia spectrum or other psychotic disorders (Criterion C under “Bipolar II Disorder”). The depressive episodes or hypomanic fluctuations must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning (Criterion D under “Bipolar II Disorder”); however, for hypomanic episodes, this requirement does not have to be met. A hypomanic episode that causes significant impairment would likely qualify for the diagnosis of manic episode and, therefore, for a lifetime diagnosis of bipolar I disorder. The recurrent major depressive episodes are often more frequent and lengthier than those occurring in bipolar I disorder.

Individuals with bipolar II disorder typically present to a clinician during a major depressive episode and are unlikely to complain initially of hypomania. Typically, the hypomanic episodes themselves do not cause impairment. Instead, the impairment results from the major depressive episodes or from a persistent pattern of unpredictable mood changes and fluctuating, unreliable interpersonal or occupational functioning. Individuals with bipolar II disorder may not view the hypomanic episodes as pathological or disadvantageous, although others may be troubled by the individual’s erratic behavior. Clinical information from other informants, such as close friends or relatives, is often useful in establishing the diagnosis of bipolar II disorder.

A hypomanic episode should not be confused with the several days of euthymia and restored energy or activity that may follow remission of a major depressive episode. Despite the substantial differences in duration and severity between a manic and hypomanic episode, bipolar II disorder is not a “milder form” of bipolar I disorder. Compared with individuals with bipolar I disorder, individuals with bipolar II disorder have greater chronicity of illness and spend, on average, more time in the depressive phase of their illness, which can be severe and/or disabling. Depressive symptoms co-occurring with a hypomanic episode or hypomanic symptoms co-occurring with a depressive episode are common in individuals with bipolar II disorder and are overrepresented in females, particularly hypomania with mixed features. Individuals experiencing hypomania with mixed features may not label their symptoms as hypomania, but instead experience them as depression with increased energy or irritability.

## Associated Features Supporting Diagnosis

A common feature of bipolar II disorder is impulsivity, which can contribute to suicide attempts and substance use disorders. Impulsivity may also stem from a concurrent personality disorder, substance use disorder, anxiety disorder, another mental disorder, or a medical condition. There may be heightened levels of creativity in some individuals with a bipolar disorder. However, that relationship may be nonlinear; that is, greater lifetime creative accomplishments have been associated with milder forms of bipolar disorder, and higher creativity has been found in unaffected family members. The individual's attachment to heightened creativity during hypomanic episodes may contribute to ambivalence about seeking treatment or undermine adherence to treatment.

## Prevalence

The 12-month prevalence of bipolar II disorder, internationally, is 0.3%. In the United States, 12-month prevalence is 0.8%. The prevalence rate of pediatric bipolar II disorder is difficult to establish. DSM-IV bipolar I, bipolar II, and bipolar disorder not otherwise specified yield a combined prevalence rate of 1.8% in U.S. and non-U.S. community samples, with higher rates (2.7% inclusive) in youths age 12 years or older.

## Development and Course

Although bipolar II disorder can begin in late adolescence and throughout adulthood, average age at onset is the mid-20s, which is slightly later than for bipolar I disorder but earlier than for major depressive disorder. The illness most often begins with a depressive episode and is not recognized as bipolar II disorder until a hypomanic episode occurs; this happens in about 12% of individuals with the initial diagnosis of major depressive disorder. Anxiety, substance use, or eating disorders may also precede the diagnosis, complicating its detection. Many individuals experience several episodes of major depression prior to the first recognized hypomanic episode.

The number of lifetime episodes (both hypomanic and major depressive episodes) tends to be higher for bipolar II disorder than for major depressive disorder or bipolar I disorder. However, individuals with bipolar I disorder are actually more likely to experience hypomanic symptoms than are individuals with bipolar II disorder. The interval between mood episodes in the course of bipolar II disorder tends to decrease as the individual ages. While the hypomanic episode is the feature that defines bipolar II disorder, depressive episodes are more enduring and disabling over time. Despite the predominance of depression, once a hypomanic episode has occurred, the diagnosis becomes bipolar II disorder and never reverts to major depressive disorder.

Approximately 5%–15% of individuals with bipolar II disorder have multiple (four or more) mood episodes (hypomanic or major depressive) within the previous 12 months. If

this pattern is present, it is noted by the specifier “with rapid cycling.” By definition, psychotic symptoms do not occur in hypomanic episodes, and they appear to be less frequent in the major depressive episodes in bipolar II disorder than in those of bipolar I disorder.

Switching from a depressive episode to a manic or hypomanic episode (with or without mixed features) may occur, both spontaneously and during treatment for depression. About 5%–15% of individuals with bipolar II disorder will ultimately develop a manic episode, which changes the diagnosis to bipolar I disorder, regardless of subsequent course.

Making the diagnosis in children is often a challenge, especially in those with irritability and hyperarousal that is *nonepisodic* (i.e., lacks the well-demarcated periods of altered mood). Nonepisodic irritability in youth is associated with an elevated risk for anxiety disorders and major depressive disorder, but not bipolar disorder, in adulthood. Persistently irritable youths have lower familial rates of bipolar disorder than do youths who have bipolar disorder. For a hypomanic episode to be diagnosed, the child’s symptoms must exceed what is expected in a given environment and culture for the child’s developmental stage. Compared with adult onset of bipolar II disorder, childhood or adolescent onset of the disorder may be associated with a more severe lifetime course. The 3-year incidence rate of first-onset bipolar II disorder in adults older than 60 years is 0.34%. However, distinguishing individuals older than 60 years with bipolar II disorder by late versus early age at onset does not appear to have any clinical utility.

## Risk and Prognostic Factors

**Genetic and physiological.** The risk of bipolar II disorder tends to be highest among relatives of individuals with bipolar II disorder, as opposed to individuals with bipolar I disorder or major depressive disorder. There may be genetic factors influencing the age at onset for bipolar disorders.

**Course modifiers.** A rapid-cycling pattern is associated with a poorer prognosis. Return to previous level of social function for individuals with bipolar II disorder is more likely for individuals of younger age and with less severe depression, suggesting adverse effects of prolonged illness on recovery. More education, fewer years of illness, and being married are independently associated with functional recovery in individuals with bipolar disorder, even after diagnostic type (I vs. II), current depressive symptoms, and presence of psychiatric comorbidity are taken into account.

## Gender-Related Diagnostic Issues

Whereas the gender ratio for bipolar I disorder is equal, findings on gender differences in bipolar II disorder are mixed, differing by type of sample (i.e., registry, community, or clinical) and country of origin. There is little to no evidence of bipolar gender differences, whereas some, but not all, clinical samples suggest that bipolar II disorder is more common in females than in males, which may reflect gender differences in treatment seeking or other factors.

Patterns of illness and comorbidity, however, seem to differ by gender, with females being more likely than males to report hypomania with mixed depressive features and a rapid-cycling course. Childbirth may be a specific trigger for a hypomanic episode, which can occur in 10%–20% of females in nonclinical populations and most typically in the early postpartum period. Distinguishing hypomania from the elated mood and reduced sleep that normally accompany the birth of a child may be challenging. Postpartum hypomania may foreshadow the onset of a depression that occurs in about half of females who experience postpartum “highs.” Accurate detection of bipolar II disorder may help in establishing appropriate treatment of the depression, which may reduce the risk of suicide and infanticide.

## Suicide Risk

Suicide risk is high in bipolar II disorder. Approximately one-third of individuals with bipolar II disorder report a lifetime history of suicide attempt. The prevalence rates of lifetime attempted suicide in bipolar II and bipolar I disorder appear to be similar (32.4% and 36.3%, respectively). However, the lethality of attempts, as defined by a lower ratio of attempts to completed suicides, may be higher in individuals with bipolar II disorder compared with individuals with bipolar I disorder. There may be an association between genetic markers and increased risk for suicidal behavior in individuals with bipolar disorder, including a 6.5-fold higher risk of suicide among first-degree relatives of bipolar II probands compared with those with bipolar I disorder.

## Functional Consequences of Bipolar II Disorder

Although many individuals with bipolar II disorder return to a fully functional level between mood episodes, at least 15% continue to have some inter-episode dysfunction, and 20% transition directly into another mood episode without inter-episode recovery. Functional recovery lags substantially behind recovery from symptoms of bipolar II disorder, especially in regard to occupational recovery, resulting in lower socioeconomic status despite equivalent levels of education with the general population. Individuals with bipolar II disorder perform more poorly than healthy individuals on cognitive tests and, with the exception of memory and semantic fluency, have similar cognitive impairment as do individuals with bipolar I disorder. Cognitive impairments associated with bipolar II disorder may contribute to vocational difficulties. Prolonged unemployment in individuals with bipolar disorder is associated with more episodes of depression, older age, increased rates of current panic disorder, and lifetime history of alcohol use disorder.

## Differential Diagnosis

**Major depressive disorder.** Perhaps the most challenging differential diagnosis to consider is major depressive disorder, which may be accompanied by hypomanic or manic symptoms that do not meet full criteria (i.e., either fewer symptoms or a shorter duration than required for a hypomanic episode). This is especially true in evaluating individuals with symptoms of irritability, which may be associated with either major depressive disorder or bipolar II disorder.

**Cyclothymic disorder.** In cyclothymic disorder, there are numerous periods of hypomanic symptoms and numerous periods of depressive symptoms that do not meet symptom or duration criteria for a major depressive episode. Bipolar II disorder is distinguished from cyclothymic disorder by the presence of one or more major depressive episodes. If a major depressive episode occurs after the first 2 years of cyclothymic disorder, the additional diagnosis of bipolar II disorder is given.

**Schizophrenia spectrum and other related psychotic disorders.** Bipolar II disorder must be distinguished from psychotic disorders (e.g., schizoaffective disorder, schizophrenia, and delusional disorder). Schizophrenia, schizoaffective disorder, and delusional disorder are all characterized by periods of psychotic symptoms that occur in the absence of prominent mood symptoms. Other helpful considerations include the accompanying symptoms, previous course, and family history.

**Panic disorder or other anxiety disorders.** Anxiety disorders need to be considered in the differential diagnosis and may frequently be present as co-occurring disorders.

**Substance use disorders.** Substance use disorders are included in the differential diagnosis.

**Attention-deficit/hyperactivity disorder.** Attention-deficit/hyperactivity disorder (ADHD) may be misdiagnosed as bipolar II disorder, especially in adolescents and children. Many

symptoms of ADHD, such as rapid speech, racing thoughts, distractibility, and less need for sleep, overlap with the symptoms of hypomania. The double counting of symptoms toward both ADHD and bipolar II disorder can be avoided if the clinician clarifies whether the symptoms represent a distinct episode and if the noticeable increase over baseline required for the diagnosis of bipolar II disorder is present.

**Personality disorders.** The same convention as applies for ADHD also applies when evaluating an individual for a personality disorder such as borderline personality disorder, since mood lability and impulsivity are common in both personality disorders and bipolar II disorder. Symptoms must represent a distinct episode, and the noticeable increase over baseline required for the diagnosis of bipolar II disorder must be present. A diagnosis of a personality disorder should not be made during an untreated mood episode unless the lifetime history supports the presence of a personality disorder.

**Other bipolar disorders.** Diagnosis of bipolar II disorder should be differentiated from bipolar I disorder by carefully considering whether there have been any past episodes of mania and from other specified and unspecified bipolar and related disorders by confirming the presence of fully syndromal hypomania and depression.

**Comorbidity**

Bipolar II disorder is more often than not associated with one or more co-occurring mental disorders, with anxiety disorders being the most common. Approximately 60% of individuals with bipolar II disorder have three or more co-occurring mental disorders; 75% have an anxiety disorder; and 37% have a substance use disorder. Children and adolescents with bipolar II disorder have a higher rate of co-occurring anxiety disorders compared with those with bipolar I disorder, and the anxiety disorder most often predates the bipolar disorder. Anxiety and substance use disorders occur in individuals with bipolar II disorder at a higher rate than in the general population. Approximately 14% of individuals with bipolar II disorder have at least one lifetime eating disorder, with binge-eating disorder being more common than bulimia nervosa and anorexia nervosa.

These commonly co-occurring disorders do not seem to follow a course of illness that is truly independent from that of the bipolar disorder, but rather have strong associations with mood states. For example, anxiety and eating disorders tend to associate most with depressive symptoms, and substance use disorders are moderately associated with manic symptoms.

**Cyclothymic Disorder**

Diagnostic Criteria	301.13 (F34.0)
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- A. For at least 2 years (at least 1 year in children and adolescents) there have been numerous periods with hypomanic symptoms that do not meet criteria for a hypomanic episode and numerous periods with depressive symptoms that do not meet criteria for a major depressive episode.
- B. During the above 2-year period (1 year in children and adolescents), the hypomanic and depressive periods have been present for at least half the time and the individual has not been without the symptoms for more than 2 months at a time.
- C. Criteria for a major depressive, manic, or hypomanic episode have never been met.
- D. The symptoms in Criterion A are not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified or unspecified schizophrenia spectrum and other psychotic disorder.
- E. The symptoms are not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g., hyperthyroidism).

should receive one of those diagnoses rather than disruptive mood dysregulation disorder. Children with disruptive mood dysregulation disorder may have symptoms that also meet criteria for an anxiety disorder and can receive both diagnoses, but children whose irritability is manifest only in the context of exacerbation of an anxiety disorder should receive the relevant anxiety disorder diagnosis rather than disruptive mood dysregulation disorder. In addition, children with autism spectrum disorders frequently present with temper outbursts when, for example, their routines are disturbed. In that instance, the temper outbursts would be considered secondary to the autism spectrum disorder, and the child should not receive the diagnosis of disruptive mood dysregulation disorder.

**Intermittent explosive disorder.** Children with symptoms suggestive of intermittent explosive disorder present with instances of severe temper outbursts, much like children with disruptive mood dysregulation disorder. However, unlike disruptive mood dysregulation disorder, intermittent explosive disorder does not require persistent disruption in mood between outbursts. In addition, intermittent explosive disorder requires only 3 months of active symptoms, in contrast to the 12-month requirement for disruptive mood dysregulation disorder. Thus, these two diagnoses should not be made in the same child. For children with outbursts and intercurrent, persistent irritability, only the diagnosis of disruptive mood dysregulation disorder should be made.

## Comorbidity

Rates of comorbidity in disruptive mood dysregulation disorder are extremely high. It is rare to find individuals whose symptoms meet criteria for disruptive mood dysregulation disorder alone. Comorbidity between disruptive mood dysregulation disorder and other DSM-defined syndromes appears higher than for many other pediatric mental illnesses; the strongest overlap is with oppositional defiant disorder. Not only is the overall rate of comorbidity high in disruptive mood dysregulation disorder, but also the range of comorbid illnesses appears particularly diverse. These children typically present to the clinic with a wide range of disruptive behavior, mood, anxiety, and even autism spectrum symptoms and diagnoses. However, children with disruptive mood dysregulation disorder should not have symptoms that meet criteria for bipolar disorder, as in that context, only the bipolar disorder diagnosis should be made. If children have symptoms that meet criteria for oppositional defiant disorder or intermittent explosive disorder *and* disruptive mood dysregulation disorder, only the diagnosis of disruptive mood dysregulation disorder should be assigned. Also, as noted earlier, the diagnosis of disruptive mood dysregulation disorder should not be assigned if the symptoms occur only in an anxiety-provoking context, when the routines of a child with autism spectrum disorder or obsessive-compulsive disorder are disturbed, or in the context of a major depressive episode.

## Major Depressive Disorder

### Diagnostic Criteria

**A.** Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

**Note:** Do not include symptoms that are clearly attributable to another medical condition.

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, hopeless) or observation made by others (e.g., appears tearful). (**Note:** In children and adolescents, can be irritable mood.)
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).



3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (**Note:** In children, consider failure to make expected weight gain.)
  4. Insomnia or hypersomnia nearly every day.
  5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
  6. Fatigue or loss of energy nearly every day.
  7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
  8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
  9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.
- B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- C. The episode is not attributable to the physiological effects of a substance or to another medical condition.

**Note:** Criteria A–C represent a major depressive episode.

**Note:** Responses to a significant loss (e.g., bereavement, financial ruin, losses from a natural disaster, a serious medical illness or disability) may include the feelings of intense sadness, rumination about the loss, insomnia, poor appetite, and weight loss noted in Criterion A, which may resemble a depressive episode. Although such symptoms may be understandable or considered appropriate to the loss, the presence of a major depressive episode in addition to the normal response to a significant loss should also be carefully considered. This decision inevitably requires the exercise of clinical judgment based on the individual's history and the cultural norms for the expression of distress in the context of loss.<sup>1</sup>

- D. The occurrence of the major depressive episode is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified and unspecified schizophrenia spectrum and other psychotic disorders.
- E. There has never been a manic episode or a hypomanic episode.

**Note:** This exclusion does not apply if all of the manic-like or hypomanic-like episodes are substance-induced or are attributable to the physiological effects of another medical condition.

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<sup>1</sup>In distinguishing grief from a major depressive episode (MDE), it is useful to consider that in grief the predominant affect is feelings of emptiness and loss, while in MDE it is persistent depressed mood and the inability to anticipate happiness or pleasure. The dysphoria in grief is likely to decrease in intensity over days to weeks and occurs in waves, the so-called pangs of grief. These waves tend to be associated with thoughts or reminders of the deceased. The depressed mood of MDE is more persistent and not tied to specific thoughts or preoccupations. The pain of grief may be accompanied by positive emotions and humor that are uncharacteristic of the pervasive unhappiness and misery characteristic of MDE. The thought content associated with grief generally features a preoccupation with thoughts and memories of the deceased, rather than the self-critical or pessimistic ruminations seen in MDE. In grief, self-esteem is generally preserved, whereas in MDE feelings of worthlessness and self-loathing are common. If self-derogatory ideation is present in grief, it typically involves perceived failings vis-à-vis the deceased (e.g., not visiting frequently enough, not telling the deceased how much he or she was loved). If a bereaved individual thinks about death and dying, such thoughts are generally focused on the deceased and possibly about "joining" the deceased, whereas in MDE such thoughts are focused on ending one's own life because of feeling worthless, undeserving of life, or unable to cope with the pain of depression.

**Coding and Recording Procedures**

The diagnostic code for major depressive disorder is based on whether this is a single or recurrent episode, current severity, presence of psychotic features, and remission status. Current severity and psychotic features are only indicated if full criteria are currently met for a major depressive episode. Remission specifiers are only indicated if the full criteria are not currently met for a major depressive episode. Codes are as follows:

Severity/course specifier	Single episode	Recurrent episode*
Mild (p. 188)	296.21 (F32.0)	296.31 (F33.0)
Moderate (p. 188)	296.22 (F32.1)	296.32 (F33.1)
Severe (p. 188)	296.23 (F32.2)	296.33 (F33.2)
With psychotic features** (p. 186)	296.24 (F32.3)	296.34 (F33.3)
In partial remission (p. 188)	296.25 (F32.4)	296.35 (F33.41)
In full remission (p. 188)	296.26 (F32.5)	296.36 (F33.42)
Unspecified	296.20 (F32.9)	296.30 (F33.9)

\*For an episode to be considered recurrent, there must be an interval of at least 2 consecutive months between separate episodes in which criteria are not met for a major depressive episode. The definitions of specifiers are found on the indicated pages.

\*\*If psychotic features are present, code the “with psychotic features” specifier irrespective of episode severity.

In recording the name of a diagnosis, terms should be listed in the following order: major depressive disorder, single or recurrent episode, severity/psychotic/remission specifiers, followed by as many of the following specifiers without codes that apply to the current episode.

*Specify:*

- With anxious distress** (p. 184)
- With mixed features** (pp. 184–185)
- With melancholic features** (p. 185)
- With atypical features** (pp. 185–186)
- With mood-congruent psychotic features** (p. 186)
- With mood-incongruent psychotic features** (p. 186)
- With catatonia** (p. 186). **Coding note:** Use additional code 293.89 (F06.1).
- With peripartum onset** (pp. 186–187)
- With seasonal pattern** (recurrent episode only) (pp. 187–188)

**Diagnostic Features**

The criterion symptoms for major depressive disorder must be present nearly every day to be considered present, with the exception of weight change and suicidal ideation. Depressed mood must be present for most of the day, in addition to being present nearly every day. Often insomnia or fatigue is the presenting complaint, and failure to probe for accompanying depressive symptoms will result in underdiagnosis. Sadness may be denied at first but may be elicited through interview or inferred from facial expression and demeanor. With individuals who focus on a somatic complaint, clinicians should determine whether the distress from that complaint is associated with specific depressive symptoms. Fatigue and sleep disturbance are present in a high proportion of cases; psychomotor disturbances are much less common but are indicative of greater overall severity, as is the presence of delusional or near-delusional guilt.

The essential feature of a major depressive episode is a period of at least 2 weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activities (Criterion A). In children and adolescents, the mood may be irritable rather than sad. The individual must also experience at least four additional symptoms drawn from a list that includes changes in appetite or weight, sleep, and psychomotor activity; decreased energy; feelings of worthlessness or guilt; difficulty thinking, concentrating, or making decisions; or recurrent thoughts of death or suicidal ideation or suicide plans or attempts. To count toward a major depressive episode, a symptom must either be newly present or must have clearly worsened compared with the person's pre-episode status. The symptoms must persist for most of the day, nearly every day, for at least 2 consecutive weeks. The episode must be accompanied by clinically significant distress or impairment in social, occupational, or other important areas of functioning. For some individuals with milder episodes, functioning may appear to be normal but requires markedly increased effort.

The mood in a major depressive episode is often described by the person as depressed, sad, hopeless, discouraged, or "down in the dumps" (Criterion A1). In some cases, sadness may be denied at first but may subsequently be elicited by interview (e.g., by pointing out that the individual looks as if he or she is about to cry). In some individuals who complain of feeling "blah," having no feelings, or feeling anxious, the presence of a depressed mood can be inferred from the person's facial expression and demeanor. Some individuals emphasize somatic complaints (e.g., bodily aches and pains) rather than reporting feelings of sadness. Many individuals report or exhibit increased irritability (e.g., persistent anger, a tendency to respond to events with angry outbursts or blaming others, an exaggerated sense of frustration over minor matters). In children and adolescents, an irritable or cranky mood may develop rather than a sad or dejected mood. This presentation should be differentiated from a pattern of irritability when frustrated.

Loss of interest or pleasure is nearly always present, at least to some degree. Individuals may report feeling less interested in hobbies, "not caring anymore," or not feeling any enjoyment in activities that were previously considered pleasurable (Criterion A2). Family members often notice social withdrawal or neglect of pleasurable avocations (e.g., a formerly avid golfer no longer plays, a child who used to enjoy soccer finds excuses not to practice). In some individuals, there is a significant reduction from previous levels of sexual interest or desire.

Appetite change may involve either a reduction or increase. Some depressed individuals report that they have to force themselves to eat. Others may eat more and may crave specific foods (e.g., sweets or other carbohydrates). When appetite changes are severe (in either direction), there may be a significant loss or gain in weight, or, in children, a failure to make expected weight gains may be noted (Criterion A3).

Sleep disturbance may take the form of either difficulty sleeping or sleeping excessively (Criterion A4). When insomnia is present, it typically takes the form of middle insomnia (i.e., waking up during the night and then having difficulty returning to sleep) or terminal insomnia (i.e., waking too early and being unable to return to sleep). Initial insomnia (i.e., difficulty falling asleep) may also occur. Individuals who present with oversleeping (hypersomnia) may experience prolonged sleep episodes at night or increased daytime sleep. Sometimes the reason that the individual seeks treatment is for the disturbed sleep.

Psychomotor changes include agitation (e.g., the inability to sit still, pacing, hand-wringing; or pulling or rubbing of the skin, clothing, or other objects) or retardation (e.g., slowed speech, thinking, and body movements; increased pauses before answering; speech that is decreased in volume, inflection, amount, or variety of content, or muteness) (Criterion A5). The psychomotor agitation or retardation must be severe enough to be observable by others and not represent merely subjective feelings.

Decreased energy, tiredness, and fatigue are common (Criterion A6). A person may report sustained fatigue without physical exertion. Even the smallest tasks seem to require

substantial effort. The efficiency with which tasks are accomplished may be reduced. For example, an individual may complain that washing and dressing in the morning are exhausting and take twice as long as usual.

The sense of worthlessness or guilt associated with a major depressive episode may include unrealistic negative evaluations of one's worth or guilty preoccupations or ruminations over minor past failings (Criterion A7). Such individuals often misinterpret neutral or trivial day-to-day events as evidence of personal defects and have an exaggerated sense of responsibility for untoward events. The sense of worthlessness or guilt may be of delusional proportions (e.g., an individual who is convinced that he or she is personally responsible for world poverty). Blaming oneself for being sick and for failing to meet occupational or interpersonal responsibilities as a result of the depression is very common and, unless delusional, is not considered sufficient to meet this criterion.

Many individuals report impaired ability to think, concentrate, or make even minor decisions (Criterion A8). They may appear easily distracted or complain of memory difficulties. Those engaged in cognitively demanding pursuits are often unable to function. In children, a precipitous drop in grades may reflect poor concentration. In elderly individuals, memory difficulties may be the chief complaint and may be mistaken for early signs of a dementia ("pseudodementia"). When the major depressive episode is successfully treated, the memory problems often fully abate. However, in some individuals, particularly elderly persons, a major depressive episode may sometimes be the initial presentation of an irreversible dementia.

Thoughts of death, suicidal ideation, or suicide attempts (Criterion A9) are common. They may range from a passive wish not to awaken in the morning or a belief that others would be better off if the individual were dead, to transient but recurrent thoughts of committing suicide, to a specific suicide plan. More severely suicidal individuals may have put their affairs in order (e.g., updated wills, settled debts), acquired needed materials (e.g., a rope or a gun), and chosen a location and time to accomplish the suicide. Motivations for suicide may include a desire to give up in the face of perceived insurmountable obstacles, an intense wish to end what is perceived as an unending and excruciatingly painful emotional state, an inability to foresee any enjoyment in life, or the wish to not be a burden to others. The resolution of such thinking may be a more meaningful measure of diminished suicide risk than denial of further plans for suicide.

The evaluation of the symptoms of a major depressive episode is especially difficult when they occur in an individual who also has a general medical condition (e.g., cancer, stroke, myocardial infarction, diabetes, pregnancy). Some of the criterion signs and symptoms of a major depressive episode are identical to those of general medical conditions (e.g., weight loss with untreated diabetes; fatigue with cancer; hypersomnia early in pregnancy; insomnia later in pregnancy or the postpartum). Such symptoms count toward a major depressive diagnosis except when they are clearly and fully attributable to a general medical condition. Nonvegetative symptoms of dysphoria, anhedonia, guilt or worthlessness, impaired concentration or indecision, and suicidal thoughts should be assessed with particular care in such cases. Definitions of major depressive episodes that have been modified to include only these nonvegetative symptoms appear to identify nearly the same individuals as do the full criteria.

## **Associated Features Supporting Diagnosis**

Major depressive disorder is associated with high mortality, much of which is accounted for by suicide; however, it is not the only cause. For example, depressed individuals admitted to nursing homes have a markedly increased likelihood of death in the first year. Individuals frequently present with tearfulness, irritability, brooding, obsessive rumination, anxiety, phobias, excessive worry over physical health, and complaints of pain (e.g., headaches; joint, abdominal, or other pains). In children, separation anxiety may occur.

Although an extensive literature exists describing neuroanatomical, neuroendocrinological, and neurophysiological correlates of major depressive disorder, no laboratory test has yielded results of sufficient sensitivity and specificity to be used as a diagnostic tool for this disorder. Until recently, hypothalamic-pituitary-adrenal axis hyperactivity had been the most extensively investigated abnormality associated with major depressive episodes, and it appears to be associated with melancholia, psychotic features, and risks for eventual suicide. Molecular studies have also implicated peripheral factors, including genetic variants in neurotrophic factors and pro-inflammatory cytokines. Additionally, functional magnetic resonance imaging studies provide evidence for functional abnormalities in specific neural systems supporting emotion processing, reward seeking, and emotion regulation in adults with major depression.

## Prevalence

Twelve-month prevalence of major depressive disorder in the United States is approximately 7%, with marked differences by age group such that the prevalence in 18- to 29-year-old individuals is threefold higher than the prevalence in individuals age 60 years or older. Females experience 1.5- to 3-fold higher rates than males beginning in early adolescence.

## Development and Course

Major depressive disorder may first appear at any age, but the likelihood of onset increases markedly with puberty. In the United States, incidence appears to peak in the 20s; however, first onset in late life is not uncommon.

The course of major depressive disorder is quite variable, such that some individuals rarely, if ever, experience remission (a period of 2 or more months with no symptoms, or only one or two symptoms to no more than a mild degree), while others experience many years with few or no symptoms between discrete episodes. It is important to distinguish individuals who present for treatment during an exacerbation of a chronic depressive illness from those whose symptoms developed recently. Chronicity of depressive symptoms substantially increases the likelihood of underlying personality, anxiety, and substance use disorders and decreases the likelihood that treatment will be followed by full symptom resolution. It is therefore useful to ask individuals presenting with depressive symptoms to identify the last period of at least 2 months during which they were entirely free of depressive symptoms.

Recovery typically begins within 3 months of onset for two in five individuals with major depression and within 1 year for four in five individuals. Recency of onset is a strong determinant of the likelihood of near-term recovery, and many individuals who have been depressed only for several months can be expected to recover spontaneously. Features associated with lower recovery rates, other than current episode duration, include psychotic features, prominent anxiety, personality disorders, and symptom severity.

The risk of recurrence becomes progressively lower over time as the duration of remission increases. The risk is higher in individuals whose preceding episode was severe, in younger individuals, and in individuals who have already experienced multiple episodes. The persistence of even mild depressive symptoms during remission is a powerful predictor of recurrence.

Many bipolar illnesses begin with one or more depressive episodes, and a substantial proportion of individuals who initially appear to have major depressive disorder will prove, in time, to instead have a bipolar disorder. This is more likely in individuals with onset of the illness in adolescence, those with psychotic features, and those with a family history of bipolar illness. The presence of a "with mixed features" specifier also increases the risk for future manic or hypomanic diagnosis. Major depressive disorder, particularly with psychotic features, may also transition into schizophrenia, a change that is much more frequent than the reverse.

Despite consistent differences between genders in prevalence rates for depressive disorders, there appear to be no clear differences by gender in phenomenology, course, or treatment response. Similarly, there are no clear effects of current age on the course or treatment response of major depressive disorder. Some symptom differences exist, though, such that hypersomnia and hyperphagia are more likely in younger individuals, and melancholic symptoms, particularly psychomotor disturbances, are more common in older individuals. The likelihood of suicide attempts lessens in middle and late life, although the risk of completed suicide does not. Depressions with earlier ages at onset are more familial and more likely to involve personality disturbances. The course of major depressive disorder within individuals does not generally change with aging. Mean times to recovery appear to be stable over long periods, and the likelihood of being in an episode does not generally increase or decrease with time.

## Risk and Prognostic Factors

**Temperamental.** Neuroticism (negative affectivity) is a well-established risk factor for the onset of major depressive disorder, and high levels appear to render individuals more likely to develop depressive episodes in response to stressful life events.

**Environmental.** Adverse childhood experiences, particularly when there are multiple experiences of diverse types, constitute a set of potent risk factors for major depressive disorder. Stressful life events are well recognized as precipitants of major depressive episodes, but the presence or absence of adverse life events near the onset of episodes does not appear to provide a useful guide to prognosis or treatment selection.

**Genetic and physiological.** First-degree family members of individuals with major depressive disorder have a risk for major depressive disorder two- to fourfold higher than that of the general population. Relative risks appear to be higher for early-onset and recurrent forms. Heritability is approximately 40%, and the personality trait neuroticism accounts for a substantial portion of this genetic liability.

**Course modifiers.** Essentially all major nonmood disorders increase the risk of an individual developing depression. Major depressive episodes that develop against the background of another disorder often follow a more refractory course. Substance use, anxiety, and borderline personality disorders are among the most common of these, and the presenting depressive symptoms may obscure and delay their recognition. However, sustained clinical improvement in depressive symptoms may depend on the appropriate treatment of underlying illnesses. Chronic or disabling medical conditions also increase risks for major depressive episodes. Such prevalent illnesses as diabetes, morbid obesity, and cardiovascular disease are often complicated by depressive episodes, and these episodes are more likely to become chronic than are depressive episodes in medically healthy individuals.

## Culture-Related Diagnostic Issues

Surveys of major depressive disorder across diverse cultures have shown sevenfold differences in 12-month prevalence rates but much more consistency in female-to-male ratio, mean ages at onset, and the degree to which presence of the disorder raises the likelihood of comorbid substance abuse. While these findings suggest substantial cultural differences in the expression of major depressive disorder, they do not permit simple linkages between particular cultures and the likelihood of specific symptoms. Rather, clinicians should be aware that in most countries the majority of cases of depression go unrecognized in primary care settings and that in many cultures, somatic symptoms are very likely to constitute the presenting complaint. Among the Criterion A symptoms, insomnia and loss of energy are the most uniformly reported.

## Gender-Related Diagnostic Issues

Although the most reproducible finding in the epidemiology of major depressive disorder has been a higher prevalence in females, there are no clear differences between genders in symptoms, course, treatment response, or functional consequences. In women, the risk for suicide attempts is higher, and the risk for suicide completion is lower. The disparity in suicide rate by gender is not as great among those with depressive disorders as it is in the population as a whole.

## Suicide Risk

The possibility of suicidal behavior exists at all times during major depressive episodes. The most consistently described risk factor is a past history of suicide attempts or threats, but it should be remembered that most completed suicides are not preceded by unsuccessful attempts. Other features associated with an increased risk for completed suicide include male sex, being single or living alone, and having prominent feelings of hopelessness. The presence of borderline personality disorder markedly increases risk for future suicide attempts.

## Functional Consequences of Major Depressive Disorder

Many of the functional consequences of major depressive disorder derive from individual symptoms. Impairment can be very mild, such that many of those who interact with the affected individual are unaware of depressive symptoms. Impairment may, however, range to complete incapacity such that the depressed individual is unable to attend to basic self-care needs or is mute or catatonic. Among individuals seen in general medical settings, those with major depressive disorder have more pain and physical illness and greater decreases in physical, social, and role functioning.

## Differential Diagnosis

**Manic episodes with irritable mood or mixed episodes.** Major depressive episodes with prominent irritable mood may be difficult to distinguish from manic episodes with irritable mood or from mixed episodes. This distinction requires a careful clinical evaluation of the presence of manic symptoms.

**Mood disorder due to another medical condition.** A major depressive episode is the appropriate diagnosis if the mood disturbance is not judged, based on individual history, physical examination, and laboratory findings, to be the direct pathophysiological consequence of a specific medical condition (e.g., multiple sclerosis, stroke, hypothyroidism).

**Substance/medication-induced depressive or bipolar disorder.** This disorder is distinguished from major depressive disorder by the fact that a substance (e.g., a drug of abuse, a medication, a toxin) appears to be etiologically related to the mood disturbance. For example, depressed mood that occurs only in the context of withdrawal from cocaine would be diagnosed as cocaine-induced depressive disorder.

**Attention-deficit/hyperactivity disorder.** Distractibility and low frustration tolerance can occur in both attention-deficit/hyperactivity disorder and a major depressive episode; if the criteria are met for both, attention-deficit/hyperactivity disorder may be diagnosed in addition to the mood disorder. However, the clinician must be cautious not to overdiagnose a major depressive episode in children with attention-deficit/hyperactivity disorder whose disturbance in mood is characterized by irritability rather than by sadness or loss of interest.

**Adjustment disorder with depressed mood.** A major depressive episode that occurs in response to a psychosocial stressor is distinguished from adjustment disorder with depressed mood by the fact that the full criteria for a major depressive episode are not met in adjustment disorder.

**Sadness.** Finally, periods of sadness are inherent aspects of the human experience. These periods should not be diagnosed as a major depressive episode unless criteria are met for severity (i.e., five out of nine symptoms), duration (i.e., most of the day, nearly every day for at least 2 weeks), and clinically significant distress or impairment. The diagnosis of other specified depressive disorder may be appropriate for presentations of depressed mood with clinically significant impairment that do not meet criteria for duration or severity.

**Comorbidity**

Other disorders with which major depressive disorder frequently co-occurs are substance-related disorders, panic disorder, obsessive-compulsive disorder, anorexia nervosa, bulimia nervosa, and borderline personality disorder.

**Persistent Depressive Disorder (Dysthymia)**

Diagnostic Criteria	300.4 (F34.1)
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This disorder represents a consolidation of DSM-IV-defined chronic major depressive disorder and dysthymic disorder.

A. Depressed mood for most of the day, for more days than not, as indicated by either subjective account or observation by others, for at least 2 years.

**Note:** In children and adolescents, mood can be irritable and duration must be at least 1 year.

B. Presence, while depressed, of two (or more) of the following:

- 1. Poor appetite or overeating.
- 2. Insomnia or hypersomnia.
- 3. Low energy or fatigue.
- 4. Low self-esteem.
- 5. Poor concentration or difficulty making decisions.
- 6. Feelings of hopelessness.

C. During the 2-year period (1 year for children or adolescents) of the disturbance, the individual has never been without the symptoms in Criteria A and B for more than 2 months at a time.

D. Criteria for a major depressive disorder may be continuously present for 2 years.

E. There has never been a manic episode or a hypomanic episode, and criteria have never been met for cyclothymic disorder.

F. The disturbance is not better explained by a persistent schizoaffective disorder, schizophrenia, delusional disorder, or other specified or unspecified schizophrenia spectrum and other psychotic disorder.

G. The symptoms are not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g. hypothyroidism).

H. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

**Note:** Because the criteria for a major depressive episode include four symptoms that are absent from the symptom list for persistent depressive disorder (dysthymia), a very limited



criteria are sufficient for a diagnosis of a major depressive episode at any time during this period, then the diagnosis of major depression should be noted, but it is coded not as a separate diagnosis but rather as a specifier with the diagnosis of persistent depressive disorder. If the individual's symptoms currently meet full criteria for a major depressive episode, then the specifier of "with intermittent major depressive episodes, with current episode" would be made. If the major depressive episode has persisted for at least a 2-year duration and remains present, then the specifier "with persistent major depressive episode" is used. When full major depressive episode criteria are not currently met but there has been at least one previous episode of major depression in the context of at least 2 years of persistent depressive symptoms, then the specifier of "with intermittent major depressive episodes, without current episode" is used. If the individual has not experienced an episode of major depression in the last 2 years, then the specifier "with pure dysthymic syndrome" is used.

**Psychotic disorders.** Depressive symptoms are a common associated feature of chronic psychotic disorders (e.g., schizoaffective disorder, schizophrenia, delusional disorder). A separate diagnosis of persistent depressive disorder is not made if the symptoms occur only during the course of the psychotic disorder (including residual phases).

**Depressive or bipolar and related disorder due to another medical condition.** Persistent depressive disorder must be distinguished from a depressive or bipolar and related disorder due to another medical condition. The diagnosis is depressive or bipolar and related disorder due to another medical condition if the mood disturbance is judged, based on history, physical examination, or laboratory findings, to be attributable to the direct pathophysiological effects of a specific, usually chronic, medical condition (e.g., multiple sclerosis). If it is judged that the depressive symptoms are not attributable to the physiological effects of another medical condition, then the primary mental disorder (e.g., persistent depressive disorder) is recorded, and the medical condition is noted as a concomitant medical condition (e.g., diabetes mellitus).

**Substance/medication-induced depressive or bipolar disorder.** A substance/medication-induced depressive or bipolar and related disorder is distinguished from persistent depressive disorder when a substance (e.g., a drug of abuse, a medication, a toxin) is judged to be etiologically related to the mood disturbance.

**Personality disorders.** Often, there is evidence of a coexisting personality disturbance. When an individual's presentation meets the criteria for both persistent depressive disorder and a personality disorder, both diagnoses are given.

## Comorbidity

In comparison to individuals with major depressive disorder, those with persistent depressive disorder are at higher risk for psychiatric comorbidity in general, and for anxiety disorders and substance use disorders in particular. Early-onset persistent depressive disorder is strongly associated with DSM-IV Cluster B and C personality disorders.

## Premenstrual Dysphoric Disorder

### Diagnostic Criteria

**625.4 (N94.3)**

- A. In the majority of menstrual cycles, at least five symptoms must be present in the final week before the onset of menses, start to *improve* within a few days after the onset of menses, and become *minimal* or absent in the week postmenses.
- B. One (or more) of the following symptoms must be present:
  1. Marked affective lability (e.g., mood swings; feeling suddenly sad or tearful, or increased sensitivity to rejection).

2. Marked irritability or anger or increased interpersonal conflicts.
3. Marked depressed mood, feelings of hopelessness, or self-deprecating thoughts.
4. Marked anxiety, tension, and/or feelings of being keyed up or on edge.

C. One (or more) of the following symptoms must additionally be present, to reach a total of *five* symptoms when combined with symptoms from Criterion B above.

1. Decreased interest in usual activities (e.g., work, school, friends, hobbies).
2. Subjective difficulty in concentration.
3. Lethargy, easy fatigability, or marked lack of energy.
4. Marked change in appetite; overeating; or specific food cravings.
5. Hypersomnia or insomnia.
6. A sense of being overwhelmed or out of control.
7. Physical symptoms such as breast tenderness or swelling, joint or muscle pain, a sensation of "bloating," or weight gain.

**Note:** The symptoms in Criteria A–C must have been met for most menstrual cycles that occurred in the preceding year.

- D. The symptoms are associated with clinically significant distress or interference with work, school, usual social activities, or relationships with others (e.g., avoidance of social activities; decreased productivity and efficiency at work, school, or home).
- E. The disturbance is not merely an exacerbation of the symptoms of another disorder, such as major depressive disorder, panic disorder, persistent depressive disorder (dysthymia), or a personality disorder (although it may co-occur with any of these disorders).
- F. Criterion A should be confirmed by prospective daily ratings during at least two symptomatic cycles. (**Note:** The diagnosis may be made provisionally prior to this confirmation.)
- G. The symptoms are not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication, other treatment) or another medical condition (e.g., hyperthyroidism).
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## Recording Procedures

If symptoms have not been confirmed by prospective daily ratings of at least two symptomatic cycles, "provisional" should be noted after the name of the diagnosis (i.e., "premenstrual dysphoric disorder, provisional").

## Diagnostic Features

The essential features of premenstrual dysphoric disorder are the expression of mood lability, irritability, dysphoria, and anxiety symptoms that occur repeatedly during the premenstrual phase of the cycle and remit around the onset of menses or shortly thereafter. These symptoms may be accompanied by behavioral and physical symptoms. Symptoms must have occurred in most of the menstrual cycles during the past year and must have an adverse effect on work or social functioning. The intensity and/or expressivity of the accompanying symptoms may be closely related to social and cultural background characteristics of the affected female, family perspectives, and more specific factors such as religious beliefs, social tolerance, and female gender role issues.

Typically, symptoms peak around the time of the onset of menses. Although it is not uncommon for symptoms to linger into the first few days of menses, the individual must have a symptom-free period in the follicular phase after the menstrual period begins. While the core symptoms include mood and anxiety symptoms, behavioral and somatic symptoms commonly also occur. However, the presence of physical and/or behavioral symptoms in the absence of mood and/or anxious symptoms is not sufficient for a diag-

nosis. Symptoms are of comparable severity (but not duration) to those of another mental disorder, such as a major depressive episode or generalized anxiety disorder. In order to confirm a provisional diagnosis, daily prospective symptom ratings are required for at least two symptomatic cycles.

## Associated Features Supporting Diagnosis

Delusions and hallucinations have been described in the late luteal phase of the menstrual cycle but are rare. The premenstrual phase has been considered by some to be a risk period for suicide.

## Prevalence

Twelve-month prevalence of premenstrual dysphoric disorder is between 1.8% and 5.8% of menstruating women. Estimates are substantially inflated if they are based on retrospective reports rather than prospective daily ratings. However, estimated prevalence based on a daily record of symptoms for 1–2 months may be less representative, as individuals with the most severe symptoms may be unable to sustain the rating process. The most rigorous estimate of premenstrual dysphoric disorder is 1.8% for women whose symptoms meet the full criteria without functional impairment and 1.3% for women whose symptoms meet the current criteria with functional impairment and without co-occurring symptoms from another mental disorder.

## Development and Course

Onset of premenstrual dysphoric disorder can occur at any point after menarche. Incidence of new cases over a 40-month follow-up period is 2.5% (95% confidence interval = 1.7–3.7). Anecdotally, many individuals, as they approach menopause, report that symptoms worsen. Symptoms cease after menopause, although cyclical hormone replacement can trigger the re-expression of symptoms.

## Risk and Prognostic Factors

**Environmental.** Environmental factors associated with the expression of premenstrual dysphoric disorder include stress, history of interpersonal trauma, seasonal changes, and sociocultural aspects of female sexual behavior in general, and female gender role in particular.

**Genetic and physiological.** Heritability of premenstrual dysphoric disorder is unknown. However, for premenstrual symptoms, estimates for heritability range between 30% and 80%, with the most stable component of premenstrual symptoms estimated to be about 50% heritable.

**Course modifiers.** Women who use oral contraceptives may have fewer premenstrual complaints than do women who do not use oral contraceptives.

## Culture-Related Diagnostic Issues

Premenstrual dysphoric disorder is not a culture-bound syndrome and has been observed in individuals in the United States, Europe, India, and Asia. It is unclear as to whether rates differ by race. Nevertheless, frequency, intensity, and expressivity of symptoms and help-seeking patterns may be significantly influenced by cultural factors.

## Diagnostic Markers

As indicated earlier, the diagnosis of premenstrual dysphoric disorder is appropriately confirmed by 2 months of prospective symptom ratings. A number of scales, including the

Daily Rating of Severity of Problems and the Visual Analogue Scales for Premenstrual Mood Symptoms, have undergone validation and are commonly used in clinical trials for premenstrual dysphoric disorder. The Premenstrual Tension Syndrome Rating Scale has a self-report and an observer version, both of which have been validated and used widely to measure illness severity in women who have premenstrual dysphoric disorder.

## Functional Consequences of Premenstrual Dysphoric Disorder

Symptoms must be associated with clinically meaningful distress and/or an obvious and marked impairment in the ability to function socially or occupationally in the week prior to menses. Impairment in social functioning may be manifested by marital discord and problems with children, other family members, or friends. Chronic marital or job problems should not be confused with dysfunction that occurs only in association with premenstrual dysphoric disorder.

## Differential Diagnosis

**Premenstrual syndrome.** Premenstrual syndrome differs from premenstrual dysphoric disorder in that a minimum of five symptoms is not required, and there is no stipulation of affective symptoms for individuals who have premenstrual syndrome. This condition may be more common than premenstrual dysphoric disorder, although the estimated prevalence of premenstrual syndrome varies. While premenstrual syndrome shares the feature of symptom expression during the premenstrual phase of the menstrual cycle, it is generally considered to be less severe than premenstrual dysphoric disorder. The presence of physical or behavioral symptoms in the premenstruum, without the required affective symptoms, likely meets criteria for premenstrual syndrome and not for premenstrual dysphoric disorder.

**Dysmenorrhea.** Dysmenorrhea is a syndrome of painful menses, but this is distinct from a syndrome characterized by affective changes. Moreover, symptoms of dysmenorrhea begin with the onset of menses, whereas symptoms of premenstrual dysphoric disorder, by definition, begin before the onset of menses, even if they linger into the first few days of menses.

**Bipolar disorder, major depressive disorder, and persistent depressive disorder (dysthymia).** Many women with (either naturally occurring or substance/medication-induced) bipolar or major depressive disorder or persistent depressive disorder believe that they have premenstrual dysphoric disorder. However, when they chart symptoms, they realize that the symptoms do not follow a premenstrual pattern. Women with another mental disorder may experience chronic symptoms or intermittent symptoms that are unrelated to menstrual cycle phase. However, because the onset of menses constitutes a memorable event, they may report that symptoms occur only during the premenstruum or that symptoms worsen premenstrually. This is one of the rationales for the requirement that symptoms be confirmed by daily prospective ratings. The process of differential diagnosis, particularly if the clinician relies on retrospective symptoms only, is made more difficult because of the overlap between symptoms of premenstrual dysphoric disorder and some other diagnoses. The overlap of symptoms is particularly salient for differentiating premenstrual dysphoric disorder from major depressive episodes, persistent depressive disorder, bipolar disorders, and borderline personality disorder. However, the rate of personality disorders is no higher in individuals with premenstrual dysphoric disorder than in those without the disorder.

**Use of hormonal treatments.** Some women who present with moderate to severe premenstrual symptoms may be using hormonal treatments, including hormonal contraceptives. If such symptoms occur after initiation of exogenous hormone use, the symptoms

may be due to the use of hormones rather than to the underlying condition of premenstrual dysphoric disorder. If the woman stops hormones and the symptoms disappear, this is consistent with substance/medication-induced depressive disorder.

Comorbidity

A major depressive episode is the most frequently reported previous disorder in individuals presenting with premenstrual dysphoric disorder. A wide range of medical (e.g., migraine, asthma, allergies, seizure disorders) or other mental disorders (e.g., depressive and bipolar disorders, anxiety disorders, bulimia nervosa, substance use disorders) may worsen in the premenstrual phase; however, the absence of a symptom-free period during the postmenstrual interval obviates a diagnosis of premenstrual dysphoric disorder. These conditions are better considered premenstrual exacerbation of a current mental or medical disorder. Although the diagnosis of premenstrual dysphoric disorder should not be assigned in situations in which an individual only experiences a premenstrual exacerbation of another mental or physical disorder, it can be considered in addition to the diagnosis of another mental or physical disorder if the individual experiences symptoms and changes in level of functioning that are characteristic of premenstrual dysphoric disorder and markedly different from the symptoms experienced as part of the ongoing disorder.

Substance/Medication-Induced Depressive Disorder

Diagnostic Criteria

- A. A prominent and persistent disturbance in mood that predominates in the clinical picture and is characterized by depressed mood or markedly diminished interest or pleasure in all, or almost all, activities.
- B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2):
  - 1. The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
  - 2. The involved substance/medication is capable of producing the symptoms in Criterion A.
- C. The disturbance is not better explained by a depressive disorder that is not substance/medication-induced. Such evidence of an independent depressive disorder could include the following:

The symptoms preceded the onset of the substance/medication use; the symptoms persist for a substantial period of time (e.g., about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence suggesting the existence of an independent non-substance/medication-induced depressive disorder (e.g., a history of recurrent non-substance/medication-related episodes).
- D. The disturbance does not occur exclusively during the course of a delirium.
- E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

**Note:** This diagnosis should be made instead of a diagnosis of substance intoxication or substance withdrawal only when the symptoms in Criterion A predominate in the clinical picture and when they are sufficiently severe to warrant clinical attention.

**Coding note:** The ICD-9-CM and ICD-10-CM codes for the [specific substance/medication]-induced depressive disorders are indicated in the table below. Note that the ICD-10-

asking to use the restroom). Severe impairment in school and social functioning, including that resulting from teasing by peers, is common. In certain instances, selective mutism may serve as a compensatory strategy to decrease anxious arousal in social encounters.

## Differential Diagnosis

**Communication disorders.** Selective mutism should be distinguished from speech disturbances that are better explained by a communication disorder, such as language disorder, speech sound disorder (previously phonological disorder), childhood-onset fluency disorder (stuttering), or pragmatic (social) communication disorder. Unlike selective mutism, the speech disturbance in these conditions is not restricted to a specific social situation.

**Neurodevelopmental disorders and schizophrenia and other psychotic disorders.** Individuals with an autism spectrum disorder, schizophrenia or another psychotic disorder, or severe intellectual disability may have problems in social communication and be unable to speak appropriately in social situations. In contrast, selective mutism should be diagnosed only when a child has an established capacity to speak in some social situations (e.g., typically at home).

**Social anxiety disorder (social phobia).** The social anxiety and social avoidance in social anxiety disorder may be associated with selective mutism. In such cases, both diagnoses may be given.

## Comorbidity

The most common comorbid conditions are other anxiety disorders, most commonly social anxiety disorder, followed by separation anxiety disorder and specific phobia. Oppositional behaviors have been noted to occur in children with selective mutism, although oppositional behavior may be limited to situations requiring speech. Communication delays or disorders also may appear in some children with selective mutism.

## Specific Phobia

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### Diagnostic Criteria

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- A. Marked fear or anxiety about a specific object or situation (e.g., flying, heights, animals, receiving an injection, seeing blood).  
**Note:** In children, the fear or anxiety may be expressed by crying, tantrums, freezing, or clinging.
- B. The phobic object or situation almost always provokes immediate fear or anxiety.
- C. The phobic object or situation is actively avoided or endured with intense fear or anxiety.
- D. The fear or anxiety is out of proportion to the actual danger posed by the specific object or situation and to the sociocultural context.
- E. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.
- F. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- G. The disturbance is not better explained by the symptoms of another mental disorder, including fear, anxiety, and avoidance of situations associated with panic-like symptoms or other incapacitating symptoms (as in agoraphobia); objects or situations related to obsessions (as in obsessive-compulsive disorder); reminders of traumatic events (as in posttraumatic stress disorder); separation from home or attachment figures (as in separation anxiety disorder); or social situations (as in social anxiety disorder).

*Specify if:*

Code based on the phobic stimulus:

**300.29 (F40.218) Animal** (e.g., spiders, insects, dogs).

**300.29 (F40.228) Natural environment** (e.g., heights, storms, water).

**300.29 (F40.23x) Blood-injection-injury** (e.g., needles, invasive medical procedures).

**Coding note:** Select specific ICD-10-CM code as follows: **F40.230** fear of blood; **F40.231** fear of injections and transfusions; **F40.232** fear of other medical care; or **F40.233** fear of injury.

**300.29 (F40.248) Situational** (e.g., airplanes, elevators, enclosed places).

**300.29 (F40.298) Other** (e.g., situations that may lead to choking or vomiting; in children, e.g., loud sounds or costumed characters).

**Coding note:** When more than one phobic stimulus is present, code all ICD-10-CM codes that apply (e.g., for fear of snakes and flying, F40.218 specific phobia, animal, and F40.248 specific phobia, situational).

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## Specifiers

It is common for individuals to have multiple specific phobias. The average individual with specific phobia fears three objects or situations, and approximately 75% of individuals with specific phobia fear more than one situation or object. In such cases, multiple specific phobia diagnoses, each with its own diagnostic code reflecting the phobic stimulus, would need to be given. For example, if an individual fears thunderstorms and flying, then two diagnoses would be given: specific phobia, natural environment, and specific phobia, situational.

## Diagnostic Features

A key feature of this disorder is that the fear or anxiety is circumscribed to the presence of a particular situation or object (Criterion A), which may be termed the *phobic stimulus*. The categories of feared situations or objects are provided as specifiers. Many individuals fear objects or situations from more than one category, or phobic stimulus. For the diagnosis of specific phobia, the response must differ from normal, transient fears that commonly occur in the population. To meet the criteria for a diagnosis, the fear or anxiety must be intense or severe (i.e., “marked”) (Criterion A). The amount of fear experienced may vary with proximity to the feared object or situation and may occur in anticipation of or in the actual presence of the object or situation. Also, the fear or anxiety may take the form of a full or limited symptom panic attack (i.e., expected panic attack). Another characteristic of specific phobias is that fear or anxiety is evoked nearly every time the individual comes into contact with the phobic stimulus (Criterion B). Thus, an individual who becomes anxious only occasionally upon being confronted with the situation or object (e.g., becomes anxious when flying only on one out of every five airplane flights) would not be diagnosed with specific phobia. However, the degree of fear or anxiety expressed may vary (from anticipatory anxiety to a full panic attack) across different occasions of encountering the phobic object or situation because of various contextual factors such as the presence of others, duration of exposure, and other threatening elements such as turbulence on a flight for individuals who fear flying. Fear and anxiety are often expressed differently between children and adults. Also, the fear or anxiety occurs as soon as the phobic object or situation is encountered (i.e., immediately rather than being delayed).

The individual actively avoids the situation, or if he or she either is unable or decides not to avoid it, the situation or object evokes intense fear or anxiety (Criterion C). *Active avoidance* means the individual intentionally behaves in ways that are designed to prevent or minimize contact with phobic objects or situations (e.g., takes tunnels instead of bridges on daily commute to work for fear of heights; avoids entering a dark room for fear of spiders; avoids accepting a job in a locale where a phobic stimulus is more common). Avoid-

ance behaviors are often obvious (e.g., an individual who fears blood refusing to go to the doctor) but are sometimes less obvious (e.g., an individual who fears snakes refusing to look at pictures that resemble the form or shape of snakes). Many individuals with specific phobias have suffered over many years and have changed their living circumstances in ways designed to avoid the phobic object or situation as much as possible (e.g., an individual diagnosed with specific phobia, animal, who moves to reside in an area devoid of the particular feared animal). Therefore, they no longer experience fear or anxiety in their daily life. In such instances, avoidance behaviors or ongoing refusal to engage in activities that would involve exposure to the phobic object or situation (e.g., repeated refusal to accept offers for work-related travel because of fear of flying) may be helpful in confirming the diagnosis in the absence of overt anxiety or panic.

The fear or anxiety is out of proportion to the actual danger that the object or situation poses, or more intense than is deemed necessary (Criterion D). Although individuals with specific phobia often recognize their reactions as disproportionate, they tend to overestimate the danger in their feared situations, and thus the judgment of being out of proportion is made by the clinician. The individual's sociocultural context should also be taken into account. For example, fears of the dark may be reasonable in a context of ongoing violence, and fear of insects may be more disproportionate in settings where insects are consumed in the diet. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more (Criterion E), which helps distinguish the disorder from transient fears that are common in the population, particularly among children. However, the duration criterion should be used as a general guide, with allowance for some degree of flexibility. The specific phobia must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning in order for the disorder to be diagnosed (Criterion F).

## Associated Features Supporting Diagnosis

Individuals with specific phobia typically experience an increase in physiological arousal in anticipation of or during exposure to a phobic object or situation. However, the physiological response to the feared situation or object varies. Whereas individuals with situational, natural environment, and animal specific phobias are likely to show sympathetic nervous system arousal, individuals with blood-injection-injury specific phobia often demonstrate a vasovagal fainting or near-fainting response that is marked by initial brief acceleration of heart rate and elevation of blood pressure followed by a deceleration of heart rate and a drop in blood pressure. Current neural systems models for specific phobia emphasize the amygdala and related structures, much as in other anxiety disorders.

## Prevalence

In the United States, the 12-month community prevalence estimate for specific phobia is approximately 7%–9%. Prevalence rates in European countries are largely similar to those in the United States (e.g., about 6%), but rates are generally lower in Asian, African, and Latin American countries (2%–4%). Prevalence rates are approximately 5% in children and are approximately 16% in 13- to 17-year-olds. Prevalence rates are lower in older individuals (about 3%–5%), possibly reflecting diminishing severity to subclinical levels. Females are more frequently affected than males, at a rate of approximately 2:1, although rates vary across different phobic stimuli. That is, animal, natural environment, and situational specific phobias are predominantly experienced by females, whereas blood-injection-injury phobia is experienced nearly equally by both genders.

## Development and Course

Specific phobia sometimes develops following a traumatic event (e.g., being attacked by an animal or stuck in an elevator), observation of others going through a traumatic event (e.g.,



watching someone drown), an unexpected panic attack in the to be feared situation (e.g., an unexpected panic attack while on the subway), or informational transmission (e.g., extensive media coverage of a plane crash). However, many individuals with specific phobia are unable to recall the specific reason for the onset of their phobias. Specific phobia usually develops in early childhood, with the majority of cases developing prior to age 10 years. The median age at onset is between 7 and 11 years, with the mean at about 10 years. Situational specific phobias tend to have a later age at onset than natural environment, animal, or blood-injection-injury specific phobias. Specific phobias that develop in childhood and adolescence are likely to wax and wane during that period. However, phobias that do persist into adulthood are unlikely to remit for the majority of individuals.

When specific phobia is being diagnosed in children, two issues should be considered. First, young children may express their fear and anxiety by crying, tantrums, freezing, or clinging. Second, young children typically are not able to understand the concept of avoidance. Therefore, the clinician should assemble additional information from parents, teachers, or others who know the child well. Excessive fears are quite common in young children but are usually transitory and only mildly impairing and thus considered developmentally appropriate. In such cases a diagnosis of specific phobia would not be made. When the diagnosis of specific phobia is being considered in a child, it is important to assess the degree of impairment and the duration of the fear, anxiety, or avoidance, and whether it is typical for the child's particular developmental stage.

Although the prevalence of specific phobia is lower in older populations, it remains one of the more commonly experienced disorders in late life. Several issues should be considered when diagnosing specific phobia in older populations. First, older individuals may be more likely to endorse natural environment specific phobias, as well as phobias of falling. Second, specific phobia (like all anxiety disorders) tends to co-occur with medical concerns in older individuals, including coronary heart disease and chronic obstructive pulmonary disease. Third, older individuals may be more likely to attribute the symptoms of anxiety to medical conditions. Fourth, older individuals may be more likely to manifest anxiety in an atypical manner (e.g., involving symptoms of both anxiety and depression) and thus be more likely to warrant a diagnosis of unspecified anxiety disorder. Additionally, the presence of specific phobia in older adults is associated with decreased quality of life and may serve as a risk factor for major neurocognitive disorder.

Although most specific phobias develop in childhood and adolescence, it is possible for a specific phobia to develop at any age, often as the result of experiences that are traumatic. For example, phobias of choking almost always follow a near-choking event at any age.

## Risk and Prognostic Factors

**Temperamental.** Temperamental risk factors for specific phobia, such as negative affectivity (neuroticism) or behavioral inhibition, are risk factors for other anxiety disorders as well.

**Environmental.** Environmental risk factors for specific phobias, such as parental over-protectiveness, parental loss and separation, and physical and sexual abuse, tend to predict other anxiety disorders as well. As noted earlier, negative or traumatic encounters with the feared object or situation sometimes (but not always) precede the development of specific phobia.

**Genetic and physiological.** There may be a genetic susceptibility to a certain category of specific phobia (e.g., an individual with a first-degree relative with a specific phobia of animals is significantly more likely to have the same specific phobia than any other category of phobia). Individuals with blood-injection-injury phobia show a unique propensity to vasovagal syncope (fainting) in the presence of the phobic stimulus.

## Culture-Related Diagnostic Issues

In the United States, Asians and Latinos report significantly lower rates of specific phobia than non-Latino whites, African Americans, and Native Americans. In addition to having lower prevalence rates of specific phobia, some countries outside of the United States, particularly Asian and African countries, show differing phobia content, age at onset, and gender ratios.

## Suicide Risk

Individuals with specific phobia are up to 60% more likely to make a suicide attempt than are individuals without the diagnosis. However, it is likely that these elevated rates are primarily due to comorbidity with personality disorders and other anxiety disorders.

## Functional Consequences of Specific Phobia

Individuals with specific phobia show similar patterns of impairment in psychosocial functioning and decreased quality of life as individuals with other anxiety disorders and alcohol and substance use disorders, including impairments in occupational and interpersonal functioning. In older adults, impairment may be seen in caregiving duties and volunteer activities. Also, fear of falling in older adults can lead to reduced mobility and reduced physical and social functioning, and may lead to receiving formal or informal home support. The distress and impairment caused by specific phobias tend to increase with the number of feared objects and situations. Thus, an individual who fears four objects or situations is likely to have more impairment in his or her occupational and social roles and a lower quality of life than an individual who fears only one object or situation. Individuals with blood-injection-injury specific phobia are often reluctant to obtain medical care even when a medical concern is present. Additionally, fear of vomiting and choking may substantially reduce dietary intake.

## Differential Diagnosis

**Agoraphobia.** Situational specific phobia may resemble agoraphobia in its clinical presentation, given the overlap in feared situations (e.g., flying, enclosed places, elevators). If an individual fears only one of the agoraphobia situations, then specific phobia, situational, may be diagnosed. If two or more agoraphobic situations are feared, a diagnosis of agoraphobia is likely warranted. For example, an individual who fears airplanes and elevators (which overlap with the “public transportation” agoraphobic situation) but does not fear other agoraphobic situations would be diagnosed with specific phobia, situational, whereas an individual who fears airplanes, elevators, and crowds (which overlap with two agoraphobic situations, “using public transportation” and “standing in line and or being in a crowd”) would be diagnosed with agoraphobia. Criterion B of agoraphobia (the situations are feared or avoided “because of thoughts that escape might be difficult or help might not be available in the event of developing panic-like symptoms or other incapacitating or embarrassing symptoms”) can also be useful in differentiating agoraphobia from specific phobia. If the situations are feared for other reasons, such as fear of being harmed directly by the object or situations (e.g., fear of the plane crashing, fear of the animal biting), a specific phobia diagnosis may be more appropriate.

**Social anxiety disorder.** If the situations are feared because of negative evaluation, social anxiety disorder should be diagnosed instead of specific phobia.

**Separation anxiety disorder.** If the situations are feared because of separation from a primary caregiver or attachment figure, separation anxiety disorder should be diagnosed instead of specific phobia.

**Panic disorder.** Individuals with specific phobia may experience panic attacks when confronted with their feared situation or object. A diagnosis of specific phobia would be given if the panic attacks only occurred in response to the specific object or situation, whereas a diagnosis of panic disorder would be given if the individual also experienced panic attacks that were unexpected (i.e., not in response to the specific phobia object or situation).

**Obsessive-compulsive disorder.** If an individual’s primary fear or anxiety is of an object or situation as a result of obsessions (e.g., fear of blood due to obsessive thoughts about contamination from blood-borne pathogens [i.e., HIV]; fear of driving due to obsessive images of harming others), and if other diagnostic criteria for obsessive-compulsive disorder are met, then obsessive-compulsive disorder should be diagnosed.

**Trauma- and stressor-related disorders.** If the phobia develops following a traumatic event, posttraumatic stress disorder (PTSD) should be considered as a diagnosis. However, traumatic events can precede the onset of PTSD and specific phobia. In this case, a diagnosis of specific phobia would be assigned only if all of the criteria for PTSD are not met.

**Eating disorders.** A diagnosis of specific phobia is not given if the avoidance behavior is exclusively limited to avoidance of food and food-related cues, in which case a diagnosis of anorexia nervosa or bulimia nervosa should be considered.

**Schizophrenia spectrum and other psychotic disorders.** When the fear and avoidance are due to delusional thinking (as in schizophrenia or other schizophrenia spectrum and other psychotic disorders), a diagnosis of specific phobia is not warranted.

Comorbidity

Specific phobia is rarely seen in medical-clinical settings in the absence of other psychopathology and is more frequently seen in nonmedical mental health settings. Specific phobia is frequently associated with a range of other disorders, especially depression in older adults. Because of early onset, specific phobia is typically the temporally primary disorder. Individuals with specific phobia are at increased risk for the development of other disorders, including other anxiety disorders, depressive and bipolar disorders, substance-related disorders, somatic symptom and related disorders, and personality disorders (particularly dependent personality disorder).

Social Anxiety Disorder (Social Phobia)

Diagnostic Criteria	300.23 (F40.10)
A. Marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others. Examples include social interactions (e.g., having a conversation, meeting unfamiliar people), being observed (e.g., eating or drinking), and performing in front of others (e.g., giving a speech).	
<b>Note:</b> In children, the anxiety must occur in peer settings and not just during interactions with adults.	
B. The individual fears that he or she will act in a way or show anxiety symptoms that will be negatively evaluated (i.e., will be humiliating or embarrassing; will lead to rejection or offend others).	
C. The social situations almost always provoke fear or anxiety.	
<b>Note:</b> In children, the fear or anxiety may be expressed by crying, tantrums, freezing, clinging, shrinking, or failing to speak in social situations.	
D. The social situations are avoided or endured with intense fear or anxiety.	

- E. The fear or anxiety is out of proportion to the actual threat posed by the social situation and to the sociocultural context.
- F. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.
- G. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- H. The fear, anxiety, or avoidance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.
- I. The fear, anxiety, or avoidance is not better explained by the symptoms of another mental disorder, such as panic disorder, body dysmorphic disorder, or autism spectrum disorder.
- J. If another medical condition (e.g., Parkinson's disease, obesity, disfigurement from burns or injury) is present, the fear, anxiety, or avoidance is clearly unrelated or is excessive.

*Specify if:*

**Performance only:** If the fear is restricted to speaking or performing in public.

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## Specifiers

Individuals with the performance only type of social anxiety disorder have performance fears that are typically most impairing in their professional lives (e.g., musicians, dancers, performers, athletes) or in roles that require regular public speaking. Performance fears may also manifest in work, school, or academic settings in which regular public presentations are required. Individuals with performance only social anxiety disorder do not fear or avoid nonperformance social situations.

## Diagnostic Features

The essential feature of social anxiety disorder is a marked, or intense, fear or anxiety of social situations in which the individual may be scrutinized by others. In children the fear or anxiety must occur in peer settings and not just during interactions with adults (Criterion A). When exposed to such social situations, the individual fears that he or she will be negatively evaluated. The individual is concerned that he or she will be judged as anxious, weak, crazy, stupid, boring, intimidating, dirty, or unlikable. The individual fears that he or she will act or appear in a certain way or show anxiety symptoms, such as blushing, trembling, sweating, stumbling over one's words, or staring, that will be negatively evaluated by others (Criterion B). Some individuals fear offending others or being rejected as a result. Fear of offending others—for example, by a gaze or by showing anxiety symptoms—may be the predominant fear in individuals from cultures with strong collectivistic orientations. An individual with fear of trembling of the hands may avoid drinking, eating, writing, or pointing in public; an individual with fear of sweating may avoid shaking hands or eating spicy foods; and an individual with fear of blushing may avoid public performance, bright lights, or discussion about intimate topics. Some individuals fear and avoid urinating in public restrooms when other individuals are present (i.e., paruresis, or “shy bladder syndrome”).

The social situations almost always provoke fear or anxiety (Criterion C). Thus, an individual who becomes anxious only occasionally in the social situation(s) would not be diagnosed with social anxiety disorder. However, the degree and type of fear and anxiety may vary (e.g., anticipatory anxiety, a panic attack) across different occasions. The anticipatory anxiety may occur sometimes far in advance of upcoming situations (e.g., worrying every day for weeks before attending a social event, repeating a speech for days in advance). In children, the fear or anxiety may be expressed by crying, tantrums, freezing, clinging, or shrinking in social situations. The individual will often avoid the feared social situations. Alternatively, the situations are endured with intense fear or anxiety (Criterion D). Avoid-

ance can be extensive (e.g., not going to parties, refusing school) or subtle (e.g., overpreparing the text of a speech, diverting attention to others, limiting eye contact).

The fear or anxiety is judged to be out of proportion to the actual risk of being negatively evaluated or to the consequences of such negative evaluation (Criterion E). Sometimes, the anxiety may not be judged to be excessive, because it is related to an actual danger (e.g., being bullied or tormented by others). However, individuals with social anxiety disorder often overestimate the negative consequences of social situations, and thus the judgment of being out of proportion is made by the clinician. The individual's socio-cultural context needs to be taken into account when this judgment is being made. For example, in certain cultures, behavior that might otherwise appear socially anxious may be considered appropriate in social situations (e.g., might be seen as a sign of respect).

The duration of the disturbance is typically at least 6 months (Criterion F). This duration threshold helps distinguish the disorder from transient social fears that are common, particularly among children and in the community. However, the duration criterion should be used as a general guide, with allowance for some degree of flexibility. The fear, anxiety, and avoidance must interfere significantly with the individual's normal routine, occupational or academic functioning, or social activities or relationships, or must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning (Criterion G). For example, an individual who is afraid to speak in public would not receive a diagnosis of social anxiety disorder if this activity is not routinely encountered on the job or in classroom work, and if the individual is not significantly distressed about it. However, if the individual avoids, or is passed over for, the job or education he or she really wants because of social anxiety symptoms, Criterion G is met.

## Associated Features Supporting Diagnosis

Individuals with social anxiety disorder may be inadequately assertive or excessively submissive or, less commonly, highly controlling of the conversation. They may show overly rigid body posture or inadequate eye contact, or speak with an overly soft voice. These individuals may be shy or withdrawn, and they may be less open in conversations and disclose little about themselves. They may seek employment in jobs that do not require social contact, although this is not the case for individuals with social anxiety disorder, performance only. They may live at home longer. Men may be delayed in marrying and having a family, whereas women who would want to work outside the home may live a life as homemaker and mother. Self-medication with substances is common (e.g., drinking before going to a party). Social anxiety among older adults may also include exacerbation of symptoms of medical illnesses, such as increased tremor or tachycardia. Blushing is a hallmark physical response of social anxiety disorder.

## Prevalence

The 12-month prevalence estimate of social anxiety disorder for the United States is approximately 7%. Lower 12-month prevalence estimates are seen in much of the world using the same diagnostic instrument, clustering around 0.5%–2.0%; median prevalence in Europe is 2.3%. The 12-month prevalence rates in children and adolescents are comparable to those in adults. Prevalence rates decrease with age. The 12-month prevalence for older adults ranges from 2% to 5%. In general, higher rates of social anxiety disorder are found in females than in males in the general population (with odds ratios ranging from 1.5 to 2.2), and the gender difference in prevalence is more pronounced in adolescents and young adults. Gender rates are equivalent or slightly higher for males in clinical samples, and it is assumed that gender roles and social expectations play a significant role in explaining the heightened help-seeking behavior in male patients. Prevalence in the United States is higher in American Indians and lower in persons of Asian, Latino, African American, and Afro-Caribbean descent compared with non-Hispanic whites.

## Development and Course

Median age at onset of social anxiety disorder in the United States is 13 years, and 75% of individuals have an age at onset between 8 and 15 years. The disorder sometimes emerges out of a childhood history of social inhibition or shyness in U.S. and European studies. Onset can also occur in early childhood. Onset of social anxiety disorder may follow a stressful or humiliating experience (e.g., being bullied, vomiting during a public speech), or it may be insidious, developing slowly. First onset in adulthood is relatively rare and is more likely to occur after a stressful or humiliating event or after life changes that require new social roles (e.g., marrying someone from a different social class, receiving a job promotion). Social anxiety disorder may diminish after an individual with fear of dating marries and may reemerge after divorce. Among individuals presenting to clinical care, the disorder tends to be particularly persistent.

Adolescents endorse a broader pattern of fear and avoidance, including of dating, compared with younger children. Older adults express social anxiety at lower levels but across a broader range of situations, whereas younger adults express higher levels of social anxiety for specific situations. In older adults, social anxiety may concern disability due to declining sensory functioning (hearing, vision) or embarrassment about one's appearance (e.g., tremor as a symptom of Parkinson's disease) or functioning due to medical conditions, incontinence, or cognitive impairment (e.g., forgetting people's names). In the community approximately 30% of individuals with social anxiety disorder experience remission of symptoms within 1 year, and about 50% experience remission within a few years. For approximately 60% of individuals without a specific treatment for social anxiety disorder, the course takes several years or longer.

Detection of social anxiety disorder in older adults may be challenging because of several factors, including a focus on somatic symptoms, comorbid medical illness, limited insight, changes to social environment or roles that may obscure impairment in social functioning, or reticence about describing psychological distress.

## Risk and Prognostic Factors

**Temperamental.** Underlying traits that predispose individuals to social anxiety disorder include behavioral inhibition and fear of negative evaluation.

**Environmental.** There is no causative role of increased rates of childhood maltreatment or other early-onset psychosocial adversity in the development of social anxiety disorder. However, childhood maltreatment and adversity are risk factors for social anxiety disorder.

**Genetic and physiological.** Traits predisposing individuals to social anxiety disorder, such as behavioral inhibition, are strongly genetically influenced. The genetic influence is subject to gene-environment interaction; that is, children with high behavioral inhibition are more susceptible to environmental influences, such as socially anxious modeling by parents. Also, social anxiety disorder is heritable (but performance-only anxiety less so). First-degree relatives have a two to six times greater chance of having social anxiety disorder, and liability to the disorder involves the interplay of disorder-specific (e.g., fear of negative evaluation) and nonspecific (e.g., neuroticism) genetic factors.

## Culture-Related Diagnostic Issues

The syndrome of *taijin kyofusho* (e.g., in Japan and Korea) is often characterized by social-evaluative concerns, fulfilling criteria for social anxiety disorder, that are associated with the fear that the individual makes *other* people uncomfortable (e.g., "My gaze upsets people so they look away and avoid me"), a fear that is at times experienced with delusional intensity. This symptom may also be found in non-Asian settings. Other presentations of *taijin kyofusho* may fulfill criteria for body dysmorphic disorder or delusional disorder.

Immigrant status is associated with significantly lower rates of social anxiety disorder in both Latino and non-Latino white groups. Prevalence rates of social anxiety disorder may not be in line with self-reported social anxiety levels in the same culture—that is, societies with strong collectivistic orientations may report high levels of social anxiety but low prevalence of social anxiety disorder.

## Gender-Related Diagnostic Issues

Females with social anxiety disorder report a greater number of social fears and comorbid depressive, bipolar, and anxiety disorders, whereas males are more likely to fear dating, have oppositional defiant disorder or conduct disorder, and use alcohol and illicit drugs to relieve symptoms of the disorder. Paruresis is more common in males.

## Functional Consequences of Social Anxiety Disorder

Social anxiety disorder is associated with elevated rates of school dropout and with decreased well-being, employment, workplace productivity, socioeconomic status, and quality of life. Social anxiety disorder is also associated with being single, unmarried, or divorced and with not having children, particularly among men. In older adults, there may be impairment in caregiving duties and volunteer activities. Social anxiety disorder also impedes leisure activities. Despite the extent of distress and social impairment associated with social anxiety disorder, only about half of individuals with the disorder in Western societies ever seek treatment, and they tend to do so only after 15–20 years of experiencing symptoms. Not being employed is a strong predictor for the persistence of social anxiety disorder.

## Differential Diagnosis

**Normative shyness.** Shyness (i.e., social reticence) is a common personality trait and is not by itself pathological. In some societies, shyness is even evaluated positively. However, when there is a significant adverse impact on social, occupational, and other important areas of functioning, a diagnosis of social anxiety disorder should be considered, and when full diagnostic criteria for social anxiety disorder are met, the disorder should be diagnosed. Only a minority (12%) of self-identified shy individuals in the United States have symptoms that meet diagnostic criteria for social anxiety disorder.

**Agoraphobia.** Individuals with agoraphobia may fear and avoid social situations (e.g., going to a movie) because escape might be difficult or help might not be available in the event of incapacitation or panic-like symptoms, whereas individuals with social anxiety disorder are most fearful of scrutiny by others. Moreover, individuals with social anxiety disorder are likely to be calm when left entirely alone, which is often not the case in agoraphobia.

**Panic disorder.** Individuals with social anxiety disorder may have panic attacks, but the concern is about fear of negative evaluation, whereas in panic disorder the concern is about the panic attacks themselves.

**Generalized anxiety disorder.** Social worries are common in generalized anxiety disorder, but the focus is more on the nature of ongoing relationships rather than on fear of negative evaluation. Individuals with generalized anxiety disorder, particularly children, may have excessive worries about the quality of their social performance, but these worries also pertain to nonsocial performance and when the individual is not being evaluated by others. In social anxiety disorder, the worries focus on social performance and others' evaluation.

**Separation anxiety disorder.** Individuals with separation anxiety disorder may avoid social settings (including school refusal) because of concerns about being separated from attachment figures or, in children, about requiring the presence of a parent when it is not developmentally appropriate. Individuals with separation anxiety disorder are usually comfortable in social settings when their attachment figure is present or when they are at

home, whereas those with social anxiety disorder may be uncomfortable when social situations occur at home or in the presence of attachment figures.

**Specific phobias.** Individuals with specific phobias may fear embarrassment or humiliation (e.g., embarrassment about fainting when they have their blood drawn), but they do not generally fear negative evaluation in other social situations.

**Selective mutism.** Individuals with selective mutism may fail to speak because of fear of negative evaluation, but they do not fear negative evaluation in social situations where no speaking is required (e.g., nonverbal play).

**Major depressive disorder.** Individuals with major depressive disorder may be concerned about being negatively evaluated by others because they feel they are bad or not worthy of being liked. In contrast, individuals with social anxiety disorder are worried about being negatively evaluated because of certain social behaviors or physical symptoms.

**Body dysmorphic disorder.** Individuals with body dysmorphic disorder are preoccupied with one or more perceived defects or flaws in their physical appearance that are not observable or appear slight to others; this preoccupation often causes social anxiety and avoidance. If their social fears and avoidance are caused only by their beliefs about their appearance, a separate diagnosis of social anxiety disorder is not warranted.

**Delusional disorder.** Individuals with delusional disorder may have nonbizarre delusions and/or hallucinations related to the delusional theme that focus on being rejected by or offending others. Although extent of insight into beliefs about social situations may vary, many individuals with social anxiety disorder have good insight that their beliefs are out of proportion to the actual threat posed by the social situation.

**Autism spectrum disorder.** Social anxiety and social communication deficits are hallmarks of autism spectrum disorder. Individuals with social anxiety disorder typically have adequate age-appropriate social relationships and social communication capacity, although they may appear to have impairment in these areas when first interacting with unfamiliar peers or adults.

**Personality disorders.** Given its frequent onset in childhood and its persistence into and through adulthood, social anxiety disorder may resemble a personality disorder. The most apparent overlap is with avoidant personality disorder. Individuals with avoidant personality disorder have a broader avoidance pattern than those with social anxiety disorder. Nonetheless, social anxiety disorder is typically more comorbid with avoidant personality disorder than with other personality disorders, and avoidant personality disorder is more comorbid with social anxiety disorder than with other anxiety disorders.

**Other mental disorders.** Social fears and discomfort can occur as part of schizophrenia, but other evidence for psychotic symptoms is usually present. In individuals with an eating disorder, it is important to determine that fear of negative evaluation about eating disorder symptoms or behaviors (e.g., purging and vomiting) is not the sole source of social anxiety before applying a diagnosis of social anxiety disorder. Similarly, obsessive-compulsive disorder may be associated with social anxiety, but the additional diagnosis of social anxiety disorder is used only when social fears and avoidance are independent of the foci of the obsessions and compulsions.

**Other medical conditions.** Medical conditions may produce symptoms that may be embarrassing (e.g. trembling in Parkinson's disease). When the fear of negative evaluation due to other medical conditions is excessive, a diagnosis of social anxiety disorder should be considered.

**Oppositional defiant disorder.** Refusal to speak due to opposition to authority figures should be differentiated from failure to speak due to fear of negative evaluation.



## Comorbidity

Social anxiety disorder is often comorbid with other anxiety disorders, major depressive disorder, and substance use disorders, and the onset of social anxiety disorder generally precedes that of the other disorders, except for specific phobia and separation anxiety disorder. Chronic social isolation in the course of a social anxiety disorder may result in major depressive disorder. Comorbidity with depression is high also in older adults. Substances may be used as self-medication for social fears, but the symptoms of substance intoxication or withdrawal, such as trembling, may also be a source of (further) social fear. Social anxiety disorder is frequently comorbid with bipolar disorder or body dysmorphic disorder; for example, an individual has body dysmorphic disorder concerning a preoccupation with a slight irregularity of her nose, as well as social anxiety disorder because of a severe fear of sounding unintelligent. The more generalized form of social anxiety disorder, but not social anxiety disorder, performance only, is often comorbid with avoidant personality disorder. In children, comorbidities with high-functioning autism and selective mutism are common.

## Panic Disorder

### Diagnostic Criteria

**300.01 (F41.0)**

**A.** Recurrent unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes, and during which time four (or more) of the following symptoms occur:

**Note:** The abrupt surge can occur from a calm state or an anxious state.

1. Palpitations, pounding heart, or accelerated heart rate.
2. Sweating.
3. Trembling or shaking.
4. Sensations of shortness of breath or smothering.
5. Feelings of choking.
6. Chest pain or discomfort.
7. Nausea or abdominal distress.
8. Feeling dizzy, unsteady, light-headed, or faint.
9. Chills or heat sensations.
10. Paresthesias (numbness or tingling sensations).
11. Derealization (feelings of unreality) or depersonalization (being detached from oneself).
12. Fear of losing control or "going crazy."
13. Fear of dying.

**Note:** Culture-specific symptoms (e.g., tinnitus, neck soreness, headache, uncontrollable screaming or crying) may be seen. Such symptoms should not count as one of the four required symptoms.

**B.** At least one of the attacks has been followed by 1 month (or more) of one or both of the following:

1. Persistent concern or worry about additional panic attacks or their consequences (e.g., losing control, having a heart attack, "going crazy").
2. A significant maladaptive change in behavior related to the attacks (e.g., behaviors designed to avoid having panic attacks, such as avoidance of exercise or unfamiliar situations).

- C. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g., hyperthyroidism, cardiopulmonary disorders).
- D. The disturbance is not better explained by another mental disorder (e.g., the panic attacks do not occur only in response to feared social situations, as in social anxiety disorder; in response to circumscribed phobic objects or situations, as in specific phobia; in response to obsessions, as in obsessive-compulsive disorder; in response to reminders of traumatic events, as in posttraumatic stress disorder; or in response to separation from attachment figures, as in separation anxiety disorder).
- 

## Diagnostic Features

*Panic disorder* refers to recurrent unexpected panic attacks (Criterion A). A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes, and during which time four or more of a list of 13 physical and cognitive symptoms occur. The term *recurrent* literally means more than one unexpected panic attack. The term *unexpected* refers to a panic attack for which there is no obvious cue or trigger at the time of occurrence—that is, the attack appears to occur from out of the blue, such as when the individual is relaxing or emerging from sleep (nocturnal panic attack). In contrast, *expected* panic attacks are attacks for which there is an obvious cue or trigger, such as a situation in which panic attacks typically occur. The determination of whether panic attacks are expected or unexpected is made by the clinician, who makes this judgment based on a combination of careful questioning as to the sequence of events preceding or leading up to the attack and the individual's own judgment of whether or not the attack seemed to occur for no apparent reason. Cultural interpretations may influence the assignment of panic attacks as expected or unexpected (see section "Culture-Related Diagnostic Issues" for this disorder). In the United States and Europe, approximately one-half of individuals with panic disorder have expected panic attacks as well as unexpected panic attacks. Thus, the presence of expected panic attacks does not rule out the diagnosis of panic disorder. For more details regarding expected versus unexpected panic attacks, see the text accompanying panic attacks (pp. 214–217).

The frequency and severity of panic attacks vary widely. In terms of frequency, there may be moderately frequent attacks (e.g., one per week) for months at a time, or short bursts of more frequent attacks (e.g., daily) separated by weeks or months without any attacks or with less frequent attacks (e.g., two per month) over many years. Persons who have infrequent panic attacks resemble persons with more frequent panic attacks in terms of panic attack symptoms, demographic characteristics, comorbidity with other disorders, family history, and biological data. In terms of severity, individuals with panic disorder may have both full-symptom (four or more symptoms) and limited-symptom (fewer than four symptoms) attacks, and the number and type of panic attack symptoms frequently differ from one panic attack to the next. However, more than one unexpected full-symptom panic attack is required for the diagnosis of panic disorder.

The worries about panic attacks or their consequences usually pertain to physical concerns, such as worry that panic attacks reflect the presence of life-threatening illnesses (e.g., cardiac disease, seizure disorder); social concerns, such as embarrassment or fear of being judged negatively by others because of visible panic symptoms; and concerns about mental functioning, such as "going crazy" or losing control (Criterion B). The maladaptive changes in behavior represent attempts to minimize or avoid panic attacks or their consequences. Examples include avoiding physical exertion, reorganizing daily life to ensure that help is available in the event of a panic attack, restricting usual daily activities, and avoiding agoraphobia-type situations, such as leaving home, using public transportation, or shopping. If agoraphobia is present, a separate diagnosis of agoraphobia is given.

## Associated Features Supporting Diagnosis

One type of unexpected panic attack is a *nocturnal* panic attack (i.e., waking from sleep in a state of panic, which differs from panicking after fully waking from sleep). In the United States, this type of panic attack has been estimated to occur at least one time in roughly one-quarter to one-third of individuals with panic disorder, of whom the majority also have daytime panic attacks. In addition to worry about panic attacks and their consequences, many individuals with panic disorder report constant or intermittent feelings of anxiety that are more broadly related to health and mental health concerns. For example, individuals with panic disorder often anticipate a catastrophic outcome from a mild physical symptom or medication side effect (e.g., thinking that they may have heart disease or that a headache means presence of a brain tumor). Such individuals often are relatively intolerant of medication side effects. In addition, there may be pervasive concerns about abilities to complete daily tasks or withstand daily stressors, excessive use of drugs (e.g., alcohol, prescribed medications or illicit drugs) to control panic attacks, or extreme behaviors aimed at controlling panic attacks (e.g., severe restrictions on food intake or avoidance of specific foods or medications because of concerns about physical symptoms that provoke panic attacks).

## Prevalence

In the general population, the 12-month prevalence estimate for panic disorder across the United States and several European countries is about 2%–3% in adults and adolescents. In the United States, significantly lower rates of panic disorder are reported among Latinos, African Americans, Caribbean blacks, and Asian Americans, compared with non-Latino whites; American Indians, by contrast, have significantly higher rates. Lower estimates have been reported for Asian, African, and Latin American countries, ranging from 0.1% to 0.8%. Females are more frequently affected than males, at a rate of approximately 2:1. The gender differentiation occurs in adolescence and is already observable before age 14 years. Although panic attacks occur in children, the overall prevalence of panic disorder is low before age 14 years (<0.4%). The rates of panic disorder show a gradual increase during adolescence, particularly in females, and possibly following the onset of puberty, and peak during adulthood. The prevalence rates decline in older individuals (i.e., 0.7% in adults over the age of 64), possibly reflecting diminishing severity to subclinical levels.

## Development and Course

The median age at onset for panic disorder in the United States is 20–24 years. A small number of cases begin in childhood, and onset after age 45 years is unusual but can occur. The usual course, if the disorder is untreated, is chronic but waxing and waning. Some individuals may have episodic outbreaks with years of remission in between, and others may have continuous severe symptomatology. Only a minority of individuals have full remission without subsequent relapse within a few years. The course of panic disorder typically is complicated by a range of other disorders, in particular other anxiety disorders, depressive disorders, and substance use disorders (see section “Comorbidity” for this disorder).

Although panic disorder is very rare in childhood, first occurrence of “fearful spells” is often dated retrospectively back to childhood. As in adults, panic disorder in adolescents tends to have a chronic course and is frequently comorbid with other anxiety, depressive, and bipolar disorders. To date, no differences in the clinical presentation between adolescents and adults have been found. However, adolescents may be less worried about additional panic attacks than are young adults. Lower prevalence of panic disorder in older adults appears to be attributable to age-related “dampening” of the autonomic nervous system response. Many older individuals with “panicky feelings” are observed to have a “hybrid” of limited-symptom panic attacks and generalized anxiety. Also, older adults

tend to attribute their panic attacks to certain stressful situations, such as a medical procedure or social setting. Older individuals may retrospectively endorse explanations for the panic attack (which would preclude the diagnosis of panic disorder), even if an attack might actually have been unexpected in the moment (and thus qualify as the basis for a panic disorder diagnosis). This may result in under-endorsement of unexpected panic attacks in older individuals. Thus, careful questioning of older adults is required to assess whether panic attacks were expected before entering the situation, so that unexpected panic attacks and the diagnosis of panic disorder are not overlooked.

While the low rate of panic disorder in children could relate to difficulties in symptom reporting, this seems unlikely given that children are capable of reporting intense fear or panic in relation to separation and to phobic objects or phobic situations. Adolescents might be less willing than adults to openly discuss panic attacks. Therefore, clinicians should be aware that unexpected panic attacks do occur in adolescents, much as they do in adults, and be attuned to this possibility when encountering adolescents presenting with episodes of intense fear or distress.

## Risk and Prognostic Factors

**Temperamental.** Negative affectivity (neuroticism) (i.e., proneness to experiencing negative emotions) and anxiety sensitivity (i.e., the disposition to believe that symptoms of anxiety are harmful) are risk factors for the onset of panic attacks and, separately, for worry about panic, although their risk status for the diagnosis of panic disorder is unknown. History of “fearful spells” (i.e., limited-symptom attacks that do not meet full criteria for a panic attack) may be a risk factor for later panic attacks and panic disorder. Although separation anxiety in childhood, especially when severe, may precede the later development of panic disorder, it is not a consistent risk factor.

**Environmental.** Reports of childhood experiences of sexual and physical abuse are more common in panic disorder than in certain other anxiety disorders. Smoking is a risk factor for panic attacks and panic disorder. Most individuals report identifiable stressors in the months before their first panic attack (e.g., interpersonal stressors and stressors related to physical well-being, such as negative experiences with illicit or prescription drugs, disease, or death in the family).

**Genetic and physiological.** It is believed that multiple genes confer vulnerability to panic disorder. However, the exact genes, gene products, or functions related to the genetic regions implicated remain unknown. Current neural systems models for panic disorder emphasize the amygdala and related structures, much as in other anxiety disorders. There is an increased risk for panic disorder among offspring of parents with anxiety, depressive, and bipolar disorders. Respiratory disturbance, such as asthma, is associated with panic disorder, in terms of past history, comorbidity, and family history.

## Culture-Related Diagnostic Issues

The rate of fears about mental and somatic symptoms of anxiety appears to vary across cultures and may influence the rate of panic attacks and panic disorder. Also, cultural expectations may influence the classification of panic attacks as expected or unexpected. For example, a Vietnamese individual who has a panic attack after walking out into a windy environment (*trúng gió*; “hit by the wind”) may attribute the panic attack to exposure to wind as a result of the cultural syndrome that links these two experiences, resulting in classification of the panic attack as expected. Various other cultural syndromes are associated with panic disorder, including *ataque de nervios* (“attack of nerves”) among Latin Americans and *khyâl* attacks and “soul loss” among Cambodians. *Ataque de nervios* may involve trembling, uncontrollable screaming or crying, aggressive or suicidal behavior, and depersonalization or derealization, which may be experienced longer than the few minutes typical

of panic attacks. Some clinical presentations of *ataque de nervios* fulfill criteria for conditions other than panic attack (e.g., other specified dissociative disorder). These syndromes impact the symptoms and frequency of panic disorder, including the individual's attribution of unexpectedness, as cultural syndromes may create fear of certain situations, ranging from interpersonal arguments (associated with *ataque de nervios*), to types of exertion (associated with *khyâl* attacks), to atmospheric wind (associated with *trúng gió* attacks). Clarification of the details of cultural attributions may aid in distinguishing expected and unexpected panic attacks. For more information regarding cultural syndromes, refer to the "Glossary of Cultural Concepts of Distress" in the Appendix.

The specific worries about panic attacks or their consequences are likely to vary from one culture to another (and across different age groups and gender). For panic disorder, U.S. community samples of non-Latino whites have significantly less functional impairment than African Americans. There are also higher rates of objectively defined severity in non-Latino Caribbean blacks with panic disorder, and lower rates of panic disorder overall in both African American and Afro-Caribbean groups, suggesting that among individuals of African descent, the criteria for panic disorder may be met only when there is substantial severity and impairment.

## Gender-Related Diagnostic Issues

The clinical features of panic disorder do not appear to differ between males and females. There is some evidence for sexual dimorphism, with an association between panic disorder and the catechol-O-methyltransferase (COMT) gene in females only.

## Diagnostic Markers

Agents with disparate mechanisms of action, such as sodium lactate, caffeine, isoproterenol, yohimbine, carbon dioxide, and cholecystokinin, provoke panic attacks in individuals with panic disorder to a much greater extent than in healthy control subjects (and in some cases, than in individuals with other anxiety, depressive, or bipolar disorders without panic attacks). Also, for a proportion of individuals with panic disorder, panic attacks are related to hypersensitive medullary carbon dioxide detectors, resulting in hypocapnia and other respiratory irregularities. However, none of these laboratory findings are considered diagnostic of panic disorder.

## Suicide Risk

Panic attacks and a diagnosis of panic disorder in the past 12 months are related to a higher rate of suicide attempts and suicidal ideation in the past 12 months even when comorbidity and a history of childhood abuse and other suicide risk factors are taken into account.

## Functional Consequences of Panic Disorder

Panic disorder is associated with high levels of social, occupational, and physical disability; considerable economic costs; and the highest number of medical visits among the anxiety disorders, although the effects are strongest with the presence of agoraphobia. Individuals with panic disorder may be frequently absent from work or school for doctor and emergency room visits, which can lead to unemployment or dropping out of school. In older adults, impairment may be seen in caregiving duties or volunteer activities. Full-symptom panic attacks typically are associated with greater morbidity (e.g., greater health care utilization, more disability, poorer quality of life) than limited-symptom attacks.

## Differential Diagnosis

**Other specified anxiety disorder or unspecified anxiety disorder.** Panic disorder should not be diagnosed if full-symptom (unexpected) panic attacks have never been experienced. In

the case of only limited-symptom unexpected panic attacks, an other specified anxiety disorder or unspecified anxiety disorder diagnosis should be considered.

**Anxiety disorder due to another medical condition.** Panic disorder is not diagnosed if the panic attacks are judged to be a direct physiological consequence of another medical condition. Examples of medical conditions that can cause panic attacks include hyperthyroidism, hyperparathyroidism, pheochromocytoma, vestibular dysfunctions, seizure disorders, and cardiopulmonary conditions (e.g., arrhythmias, supraventricular tachycardia, asthma, chronic obstructive pulmonary disease [COPD]). Appropriate laboratory tests (e.g., serum calcium levels for hyperparathyroidism; Holter monitor for arrhythmias) or physical examinations (e.g., for cardiac conditions) may be helpful in determining the etiological role of another medical condition.

**Substance/medication-induced anxiety disorder.** Panic disorder is not diagnosed if the panic attacks are judged to be a direct physiological consequence of a substance. Intoxication with central nervous system stimulants (e.g., cocaine, amphetamines, caffeine) or cannabis and withdrawal from central nervous system depressants (e.g., alcohol, barbiturates) can precipitate a panic attack. However, if panic attacks continue to occur outside of the context of substance use (e.g., long after the effects of intoxication or withdrawal have ended), a diagnosis of panic disorder should be considered. In addition, because panic disorder may precede substance use in some individuals and may be associated with increased substance use, especially for purposes of self-medication, a detailed history should be taken to determine if the individual had panic attacks prior to excessive substance use. If this is the case, a diagnosis of panic disorder should be considered in addition to a diagnosis of substance use disorder. Features such as onset after age 45 years or the presence of atypical symptoms during a panic attack (e.g., vertigo, loss of consciousness, loss of bladder or bowel control, slurred speech, amnesia) suggest the possibility that another medical condition or a substance may be causing the panic attack symptoms.

**Other mental disorders with panic attacks as an associated feature (e.g., other anxiety disorders and psychotic disorders).** Panic attacks that occur as a symptom of other anxiety disorders are expected (e.g., triggered by social situations in social anxiety disorder, by phobic objects or situations in specific phobia or agoraphobia, by worry in generalized anxiety disorder, by separation from home or attachment figures in separation anxiety disorder) and thus would not meet criteria for panic disorder. (**Note:** Sometimes an unexpected panic attack is associated with the onset of another anxiety disorder, but then the attacks become expected, whereas panic disorder is characterized by recurrent unexpected panic attacks.) If the panic attacks occur only in response to specific triggers, then only the relevant anxiety disorder is assigned. However, if the individual experiences unexpected panic attacks as well and shows persistent concern and worry or behavioral change because of the attacks, then an additional diagnosis of panic disorder should be considered.

## Comorbidity

Panic disorder infrequently occurs in clinical settings in the absence of other psychopathology. The prevalence of panic disorder is elevated in individuals with other disorders, particularly other anxiety disorders (and especially agoraphobia), major depression, bipolar disorder, and possibly mild alcohol use disorder. While panic disorder often has an earlier age at onset than the comorbid disorder(s), onset sometimes occurs after the comorbid disorder and may be seen as a severity marker of the comorbid illness.

Reported lifetime rates of comorbidity between major depressive disorder and panic disorder vary widely, ranging from 10% to 65% in individuals with panic disorder. In approximately one-third of individuals with both disorders, the depression precedes the onset of panic disorder. In the remaining two-thirds, depression occurs coincident with or following the onset of panic disorder. A subset of individuals with panic disorder develop a substance-related disorder, which for some represents an attempt to treat their anxiety

## Generalized Anxiety Disorder

### Diagnostic Criteria

300.02 (F41.1)

- A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance).
- B. The individual finds it difficult to control the worry.
- C. The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms having been present for more days than not for the past 6 months):

**Note:** Only one item is required in children.

1. Restlessness or feeling keyed up or on edge.
  2. Being easily fatigued.
  3. Difficulty concentrating or mind going blank.
  4. Irritability.
  5. Muscle tension.
  6. Sleep disturbance (difficulty falling or staying asleep, or restless, unsatisfying sleep).
- D. The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
  - E. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g., hyperthyroidism).
  - F. The disturbance is not better explained by another mental disorder (e.g., anxiety or worry about having panic attacks in panic disorder, negative evaluation in social anxiety disorder [social phobia], contamination or other obsessions in obsessive-compulsive disorder, separation from attachment figures in separation anxiety disorder, reminders of traumatic events in posttraumatic stress disorder, gaining weight in anorexia nervosa, physical complaints in somatic symptom disorder, perceived appearance flaws in body dysmorphic disorder, having a serious illness in illness anxiety disorder, or the content of delusional beliefs in schizophrenia or delusional disorder).

### Diagnostic Features

The essential feature of generalized anxiety disorder is excessive anxiety and worry (apprehensive expectation) about a number of events or activities. The intensity, duration, or frequency of the anxiety and worry is out of proportion to the actual likelihood or impact of the anticipated event. The individual finds it difficult to control the worry and to keep worrisome thoughts from interfering with attention to tasks at hand. Adults with generalized anxiety disorder often worry about everyday, routine life circumstances, such as possible job responsibilities, health and finances, the health of family members, misfortune to their children, or minor matters (e.g., doing household chores or being late for appointments). Children with generalized anxiety disorder tend to worry excessively about their competence or the quality of their performance. During the course of the disorder, the focus of worry may shift from one concern to another.

Several features distinguish generalized anxiety disorder from nonpathological anxiety. First, the worries associated with generalized anxiety disorder are excessive and typically interfere significantly with psychosocial functioning, whereas the worries of everyday life are not excessive and are perceived as more manageable and may be put off when more pressing matters arise. Second, the worries associated with generalized anxiety disorder are

more pervasive, pronounced, and distressing; have longer duration; and frequently occur without precipitants. The greater the range of life circumstances about which a person worries (e.g., finances, children's safety, job performance), the more likely his or her symptoms are to meet criteria for generalized anxiety disorder. Third, everyday worries are much less likely to be accompanied by physical symptoms (e.g., restlessness or feeling keyed up or on edge). Individuals with generalized anxiety disorder report subjective distress due to constant worry and related impairment in social, occupational, or other important areas of functioning.

The anxiety and worry are accompanied by at least three of the following additional symptoms: restlessness or feeling keyed up or on edge, being easily fatigued, difficulty concentrating or mind going blank, irritability, muscle tension, and disturbed sleep, although only one additional symptom is required in children.

## **Associated Features Supporting Diagnosis**

Associated with muscle tension, there may be trembling, twitching, feeling shaky, and muscle aches or soreness. Many individuals with generalized anxiety disorder also experience somatic symptoms (e.g., sweating, nausea, diarrhea) and an exaggerated startle response. Symptoms of autonomic hyperarousal (e.g., accelerated heart rate, shortness of breath, dizziness) are less prominent in generalized anxiety disorder than in other anxiety disorders, such as panic disorder. Other conditions that may be associated with stress (e.g., irritable bowel syndrome, headaches) frequently accompany generalized anxiety disorder.

## **Prevalence**

The 12-month prevalence of generalized anxiety disorder is 0.9% among adolescents and 2.9% among adults in the general community of the United States. The 12-month prevalence for the disorder in other countries ranges from 0.4% to 3.6%. The lifetime morbid risk is 9.0%. Females are twice as likely as males to experience generalized anxiety disorder. The prevalence of the diagnosis peaks in middle age and declines across the later years of life.

Individuals of European descent tend to experience generalized anxiety disorder more frequently than do individuals of non-European descent (i.e., Asian, African, Native American and Pacific Islander). Furthermore, individuals from developed countries are more likely than individuals from nondeveloped countries to report that they have experienced symptoms that meet criteria for generalized anxiety disorder in their lifetime.

## **Development and Course**

Many individuals with generalized anxiety disorder report that they have felt anxious and nervous all of their lives. The median age at onset for generalized anxiety disorder is 30 years; however, age at onset is spread over a very broad range. The median age at onset is later than that for the other anxiety disorders. The symptoms of excessive worry and anxiety may occur early in life but are then manifested as an anxious temperament. Onset of the disorder rarely occurs prior to adolescence. The symptoms of generalized anxiety disorder tend to be chronic and wax and wane across the lifespan, fluctuating between syndromal and subsyndromal forms of the disorder. Rates of full remission are very low.

The clinical expression of generalized anxiety disorder is relatively consistent across the lifespan. The primary difference across age groups is in the content of the individual's worry. Children and adolescents tend to worry more about school and sporting performance, whereas older adults report greater concern about the well-being of family or their own physical health. Thus, the content of an individual's worry tends to be age appropriate. Younger adults experience greater severity of symptoms than do older adults.

The earlier in life individuals have symptoms that meet criteria for generalized anxiety disorder, the more comorbidity they tend to have and the more impaired they are likely to



be. The advent of chronic physical disease can be a potent issue for excessive worry in the elderly. In the frail elderly, worries about safety—and especially about falling—may limit activities. In those with early cognitive impairment, what appears to be excessive worry about, for example, the whereabouts of things is probably better regarded as realistic given the cognitive impairment.

In children and adolescents with generalized anxiety disorder, the anxieties and worries often concern the quality of their performance or competence at school or in sporting events, even when their performance is not being evaluated by others. There may be excessive concerns about punctuality. They may also worry about catastrophic events, such as earthquakes or nuclear war. Children with the disorder may be overly conforming, perfectionist, and unsure of themselves and tend to redo tasks because of excessive dissatisfaction with less-than-perfect performance. They are typically overzealous in seeking reassurance and approval and require excessive reassurance about their performance and other things they are worried about.

Generalized anxiety disorder may be overdiagnosed in children. When this diagnosis is being considered in children, a thorough evaluation for the presence of other childhood anxiety disorders and other mental disorders should be done to determine whether the worries may be better explained by one of these disorders. Separation anxiety disorder, social anxiety disorder (social phobia), and obsessive-compulsive disorder are often accompanied by worries that may mimic those described in generalized anxiety disorder. For example, a child with social anxiety disorder may be concerned about school performance because of fear of humiliation. Worries about illness may also be better explained by separation anxiety disorder or obsessive-compulsive disorder.

## Risk and Prognostic Factors

**Temperamental.** Behavioral inhibition, negative affectivity (neuroticism), and harm avoidance have been associated with generalized anxiety disorder.

**Environmental.** Although childhood adversities and parental overprotection have been associated with generalized anxiety disorder, no environmental factors have been identified as specific to generalized anxiety disorder or necessary or sufficient for making the diagnosis.

**Genetic and physiological.** One-third of the risk of experiencing generalized anxiety disorder is genetic, and these genetic factors overlap with the risk of neuroticism and are shared with other anxiety and mood disorders, particularly major depressive disorder.

## Culture-Related Diagnostic Issues

There is considerable cultural variation in the expression of generalized anxiety disorder. For example, in some cultures, somatic symptoms predominate in the expression of the disorder, whereas in other cultures cognitive symptoms tend to predominate. This difference may be more evident on initial presentation than subsequently, as more symptoms are reported over time. There is no information as to whether the propensity for excessive worrying is related to culture, although the topic being worried about can be culture specific. It is important to consider the social and cultural context when evaluating whether worries about certain situations are excessive.

## Gender-Related Diagnostic Issues

In clinical settings, generalized anxiety disorder is diagnosed somewhat more frequently in females than in males (about 55%–60% of those presenting with the disorder are female). In epidemiological studies, approximately two-thirds are female. Females and males who experience generalized anxiety disorder appear to have similar symptoms but

demonstrate different patterns of comorbidity consistent with gender differences in the prevalence of disorders. In females, comorbidity is largely confined to the anxiety disorders and unipolar depression, whereas in males, comorbidity is more likely to extend to the substance use disorders as well.

## Functional Consequences of Generalized Anxiety Disorder

Excessive worrying impairs the individual's capacity to do things quickly and efficiently, whether at home or at work. The worrying takes time and energy; the associated symptoms of muscle tension and feeling keyed up or on edge, tiredness, difficulty concentrating, and disturbed sleep contribute to the impairment. Importantly the excessive worrying may impair the ability of individuals with generalized anxiety disorder to encourage confidence in their children.

Generalized anxiety disorder is associated with significant disability and distress that is independent of comorbid disorders, and most non-institutionalized adults with the disorder are moderately to seriously disabled. Generalized anxiety disorder accounts for 110 million disability days per annum in the U.S. population.

## Differential Diagnosis

**Anxiety disorder due to another medical condition.** The diagnosis of anxiety disorder associated with another medical condition should be assigned if the individual's anxiety and worry are judged, based on history, laboratory findings, or physical examination, to be a physiological effect of another specific medical condition (e.g., pheochromocytoma, hyperthyroidism).

**Substance/medication-induced anxiety disorder.** A substance/medication-induced anxiety disorder is distinguished from generalized anxiety disorder by the fact that a substance or medication (e.g., a drug of abuse, exposure to a toxin) is judged to be etiologically related to the anxiety. For example, severe anxiety that occurs only in the context of heavy coffee consumption would be diagnosed as caffeine-induced anxiety disorder.

**Social anxiety disorder.** Individuals with social anxiety disorder often have anticipatory anxiety that is focused on upcoming social situations in which they must perform or be evaluated by others, whereas individuals with generalized anxiety disorder worry, whether or not they are being evaluated.

**Obsessive-compulsive disorder.** Several features distinguish the excessive worry of generalized anxiety disorder from the obsessional thoughts of obsessive-compulsive disorder. In generalized anxiety disorder the focus of the worry is about forthcoming problems, and it is the excessiveness of the worry about future events that is abnormal. In obsessive-compulsive disorder, the obsessions are inappropriate ideas that take the form of intrusive and unwanted thoughts, urges, or images.

**Posttraumatic stress disorder and adjustment disorders.** Anxiety is invariably present in posttraumatic stress disorder. Generalized anxiety disorder is not diagnosed if the anxiety and worry are better explained by symptoms of posttraumatic stress disorder. Anxiety may also be present in adjustment disorder, but this residual category should be used only when the criteria are not met for any other disorder (including generalized anxiety disorder). Moreover, in adjustment disorders, the anxiety occurs in response to an identifiable stressor within 3 months of the onset of the stressor and does not persist for more than 6 months after the termination of the stressor or its consequences.

**Depressive, bipolar, and psychotic disorders.** Generalized anxiety/worry is a common associated feature of depressive, bipolar, and psychotic disorders and should not be di-

agnosed separately if the excessive worry has occurred only during the course of these conditions.

Comorbidity

Individuals whose presentation meets criteria for generalized anxiety disorder are likely to have met, or currently meet, criteria for other anxiety and unipolar depressive disorders. The neuroticism or emotional liability that underpins this pattern of comorbidity is associated with temperamental antecedents and genetic and environmental risk factors shared between these disorders, although independent pathways are also possible. Comorbidity with substance use, conduct, psychotic, neurodevelopmental, and neurocognitive disorders is less common.

Substance/Medication-Induced Anxiety Disorder

Diagnostic Criteria

- A. Panic attacks or anxiety is predominant in the clinical picture.
- B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2):
  - 1. The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
  - 2. The involved substance/medication is capable of producing the symptoms in Criterion A.
- C. The disturbance is not better explained by an anxiety disorder that is not substance/medication-induced. Such evidence of an independent anxiety disorder could include the following:

The symptoms precede the onset of the substance/medication use; the symptoms persist for a substantial period of time (e.g., about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence suggesting the existence of an independent non-substance/medication-induced anxiety disorder (e.g., a history of recurrent non-substance/medication-related episodes).
- D. The disturbance does not occur exclusively during the course of a delirium.
- E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

**Note:** This diagnosis should be made instead of a diagnosis of substance intoxication or substance withdrawal only when the symptoms in Criterion A predominate in the clinical picture and they are sufficiently severe to warrant clinical attention.

**Coding note:** The ICD-9-CM and ICD-10-CM codes for the [specific substance/medication]-induced anxiety disorders are indicated in the table below. Note that the ICD-10-CM code depends on whether or not there is a comorbid substance use disorder present for the same class of substance. If a mild substance use disorder is comorbid with the substance-induced anxiety disorder, the 4th position character is “1,” and the clinician should record “mild [substance] use disorder” before the substance-induced anxiety disorder (e.g., “mild cocaine use disorder with cocaine-induced anxiety disorder”). If a moderate or severe substance use disorder is comorbid with the substance-induced anxiety disorder, the 4th position character is “2,” and the clinician should record “moderate [substance] use disorder” or “severe [substance] use disorder,” depending on the severity of the comorbid substance use disorder. If there is no comorbid substance use disorder (e.g., after a one-

# Obsessive-Compulsive Disorder

## Diagnostic Criteria

**300.3 (F42)**

### A. Presence of obsessions, compulsions, or both:

Obsessions are defined by (1) and (2):

1. Recurrent and persistent thoughts, urges, or images that are experienced, at some time during the disturbance, as intrusive and unwanted, and that in most individuals cause marked anxiety or distress.
2. The individual attempts to ignore or suppress such thoughts, urges, or images, or to neutralize them with some other thought or action (i.e., by performing a compulsion).

Compulsions are defined by (1) and (2):

1. Repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly.
2. The behaviors or mental acts are aimed at preventing or reducing anxiety or distress, or preventing some dreaded event or situation; however, these behaviors or mental acts are not connected in a realistic way with what they are designed to neutralize or prevent, or are clearly excessive.

**Note:** Young children may not be able to articulate the aims of these behaviors or mental acts.

- B. The obsessions or compulsions are time-consuming (e.g., take more than 1 hour per day) or cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- C. The obsessive-compulsive symptoms are not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.
- D. The disturbance is not better explained by the symptoms of another mental disorder (e.g., excessive worries, as in generalized anxiety disorder; preoccupation with appearance, as in body dysmorphic disorder; difficulty discarding or parting with possessions, as in hoarding disorder; hair pulling, as in trichotillomania [hair-pulling disorder]; skin picking, as in excoriation [skin-picking] disorder; stereotypies, as in stereotypic movement disorder; ritualized eating behavior, as in eating disorders; preoccupation with substances or gambling, as in substance-related and addictive disorders; preoccupation with having an illness, as in illness anxiety disorder; sexual urges or fantasies, as in paraphilic disorders; impulses, as in disruptive, impulse-control, and conduct disorders; guilty ruminations, as in major depressive disorder; thought insertion or delusional preoccupations, as in schizophrenia spectrum and other psychotic disorders; or repetitive patterns of behavior, as in autism spectrum disorder).

### Specify if:

**With good or fair insight:** The individual recognizes that obsessive-compulsive disorder beliefs are definitely or probably not true or that they may or may not be true.

**With poor insight:** The individual thinks obsessive-compulsive disorder beliefs are probably true.

**With absent insight/delusional beliefs:** The individual is completely convinced that obsessive-compulsive disorder beliefs are true.

### Specify if:

**Tic-related:** The individual has a current or past history of a tic disorder.

## Specifiers

Many individuals with obsessive-compulsive disorder (OCD) have dysfunctional beliefs. These beliefs can include an inflated sense of responsibility and the tendency to overestimate threat; perfectionism and intolerance of uncertainty; and over-importance of thoughts (e.g., believing that having a forbidden thought is as bad as acting on it) and the need to control thoughts.

Individuals with OCD vary in the degree of insight they have about the accuracy of the beliefs that underlie their obsessive-compulsive symptoms. Many individuals have *good or fair insight* (e.g., the individual believes that the house definitely will not, probably will not, or may or may not burn down if the stove is not checked 30 times). Some have *poor insight* (e.g., the individual believes that the house will probably burn down if the stove is not checked 30 times), and a few (4% or less) have *absent insight/delusional beliefs* (e.g., the individual is convinced that the house will burn down if the stove is not checked 30 times). Insight can vary within an individual over the course of the illness. Poorer insight has been linked to worse long-term outcome.

Up to 30% of individuals with OCD have a lifetime tic disorder. This is most common in males with onset of OCD in childhood. These individuals tend to differ from those without a history of tic disorders in the themes of their OCD symptoms, comorbidity, course, and pattern of familial transmission.

## Diagnostic Features

The characteristic symptoms of OCD are the presence of obsessions and compulsions (Criterion A). *Obsessions* are repetitive and persistent thoughts (e.g., of contamination), images (e.g., of violent or horrific scenes), or urges (e.g., to stab someone). Importantly, obsessions are not pleasurable or experienced as voluntary: they are intrusive and unwanted and cause marked distress or anxiety in most individuals. The individual attempts to ignore or suppress these obsessions (e.g., avoiding triggers or using thought suppression) or to neutralize them with another thought or action (e.g., performing a compulsion). *Compulsions* (or rituals) are repetitive behaviors (e.g., washing, checking) or mental acts (e.g., counting, repeating words silently) that the individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly. Most individuals with OCD have both obsessions and compulsions. Compulsions are typically performed in response to an obsession (e.g., thoughts of contamination leading to washing rituals or that something is incorrect leading to repeating rituals until it feels “just right”). The aim is to reduce the distress triggered by obsessions or to prevent a feared event (e.g., becoming ill). However, these compulsions either are not connected in a realistic way to the feared event (e.g., arranging items symmetrically to prevent harm to a loved one) or are clearly excessive (e.g., showering for hours each day). Compulsions are not done for pleasure, although some individuals experience relief from anxiety or distress.

Criterion B emphasizes that obsessions and compulsions must be time-consuming (e.g., more than 1 hour per day) or cause clinically significant distress or impairment to warrant a diagnosis of OCD. This criterion helps to distinguish the disorder from the occasional intrusive thoughts or repetitive behaviors that are common in the general population (e.g., double-checking that a door is locked). The frequency and severity of obsessions and compulsions vary across individuals with OCD (e.g., some have mild to moderate symptoms, spending 1–3 hours per day obsessing or doing compulsions, whereas others have nearly constant intrusive thoughts or compulsions that can be incapacitating).

## Associated Features Supporting Diagnosis

The specific content of obsessions and compulsions varies between individuals. However, certain themes, or dimensions, are common, including those of cleaning (contamination obsessions and cleaning compulsions); symmetry (symmetry obsessions and repeating,

ordering, and counting compulsions); forbidden or taboo thoughts (e.g., aggressive, sexual, or religious obsessions and related compulsions); and harm (e.g., fears of harm to oneself or others and checking compulsions). Some individuals also have difficulties discarding and accumulate (hoard) objects as a consequence of typical obsessions and compulsions, such as fears of harming others. These themes occur across different cultures, are relatively consistent over time in adults with the disorder, and may be associated with different neural substrates. Importantly, individuals often have symptoms in more than one dimension.

Individuals with OCD experience a range of affective responses when confronted with situations that trigger obsessions and compulsions. For example, many individuals experience marked anxiety that can include recurrent panic attacks. Others report strong feelings of disgust. While performing compulsions, some individuals report a distressing sense of “incompleteness” or uneasiness until things look, feel, or sound “just right.”

It is common for individuals with the disorder to avoid people, places, and things that trigger obsessions and compulsions. For example, individuals with contamination concerns might avoid public situations (e.g., restaurants, public restrooms) to reduce exposure to feared contaminants; individuals with intrusive thoughts about causing harm might avoid social interactions.

## Prevalence

The 12-month prevalence of OCD in the United States is 1.2%, with a similar prevalence internationally (1.1%–1.8%). Females are affected at a slightly higher rate than males in adulthood, although males are more commonly affected in childhood.

## Development and Course

In the United States, the mean age at onset of OCD is 19.5 years, and 25% of cases start by age 14 years. Onset after age 35 years is unusual but does occur. Males have an earlier age at onset than females: nearly 25% of males have onset before age 10 years. The onset of symptoms is typically gradual; however, acute onset has also been reported.

If OCD is untreated, the course is usually chronic, often with waxing and waning symptoms. Some individuals have an episodic course, and a minority have a deteriorating course. Without treatment, remission rates in adults are low (e.g., 20% for those reevaluated 40 years later). Onset in childhood or adolescence can lead to a lifetime of OCD. However, 40% of individuals with onset of OCD in childhood or adolescence may experience remission by early adulthood. The course of OCD is often complicated by the co-occurrence of other disorders (see section “Comorbidity” for this disorder).

Compulsions are more easily diagnosed in children than obsessions are because compulsions are observable. However, most children have both obsessions and compulsions (as do most adults). The pattern of symptoms in adults can be stable over time, but it is more variable in children. Some differences in the content of obsessions and compulsions have been reported when children and adolescent samples have been compared with adult samples. These differences likely reflect content appropriate to different developmental stages (e.g., higher rates of sexual and religious obsessions in adolescents than in children; higher rates of harm obsessions [e.g., fears of catastrophic events, such as death or illness to self or loved ones] in children and adolescents than in adults).

## Risk and Prognostic Factors

**Temperamental.** Greater internalizing symptoms, higher negative emotionality, and behavioral inhibition in childhood are possible temperamental risk factors.

**Environmental.** Physical and sexual abuse in childhood and other stressful or traumatic events have been associated with an increased risk for developing OCD. Some children

may develop the sudden onset of obsessive-compulsive symptoms, which has been associated with different environmental factors, including various infectious agents and a post-infectious autoimmune syndrome.

**Genetic and physiological.** The rate of OCD among first-degree relatives of adults with OCD is approximately two times that among first-degree relatives of those without the disorder; however, among first-degree relatives of individuals with onset of OCD in childhood or adolescence, the rate is increased 10-fold. Familial transmission is due in part to genetic factors (e.g., a concordance rate of 0.57 for monozygotic vs. 0.22 for dizygotic twins). Dysfunction in the orbitofrontal cortex, anterior cingulate cortex, and striatum have been most strongly implicated.

## **Culture-Related Diagnostic Issues**

OCD occurs across the world. There is substantial similarity across cultures in the gender distribution, age at onset, and comorbidity of OCD. Moreover, around the globe, there is a similar symptom structure involving cleaning, symmetry, hoarding, taboo thoughts, or fear of harm. However, regional variation in symptom expression exists, and cultural factors may shape the content of obsessions and compulsions.

## **Gender-Related Diagnostic Issues**

Males have an earlier age at onset of OCD than females and are more likely to have comorbid tic disorders. Gender differences in the pattern of symptom dimensions have been reported, with, for example, females more likely to have symptoms in the cleaning dimension and males more likely to have symptoms in the forbidden thoughts and symmetry dimensions. Onset or exacerbation of OCD, as well as symptoms that can interfere with the mother-infant relationship (e.g., aggressive obsessions leading to avoidance of the infant), have been reported in the peripartum period.

## **Suicide Risk**

Suicidal thoughts occur at some point in as many as about half of individuals with OCD. Suicide attempts are also reported in up to one-quarter of individuals with OCD; the presence of comorbid major depressive disorder increases the risk.

## **Functional Consequences of Obsessive-Compulsive Disorder**

OCD is associated with reduced quality of life as well as high levels of social and occupational impairment. Impairment occurs across many different domains of life and is associated with symptom severity. Impairment can be caused by the time spent obsessing and doing compulsions. Avoidance of situations that can trigger obsessions or compulsions can also severely restrict functioning. In addition, specific symptoms can create specific obstacles. For example, obsessions about harm can make relationships with family and friends feel hazardous; the result can be avoidance of these relationships. Obsessions about symmetry can derail the timely completion of school or work projects because the project never feels “just right,” potentially resulting in school failure or job loss. Health consequences can also occur. For example, individuals with contamination concerns may avoid doctors’ offices and hospitals (e.g., because of fears of exposure to germs) or develop dermatological problems (e.g., skin lesions due to excessive washing). Sometimes the symptoms of the disorder interfere with its own treatment (e.g., when medications are considered contaminated). When the disorder starts in childhood or adolescence, individuals may experience developmental difficulties. For example, adolescents may avoid socializing with peers; young adults may struggle when they leave home to live independently.

The result can be few significant relationships outside the family and a lack of autonomy and financial independence from their family of origin. In addition, some individuals with OCD try to impose rules and prohibitions on family members because of their disorder (e.g., no one in the family can have visitors to the house for fear of contamination), and this can lead to family dysfunction.

## Differential Diagnosis

**Anxiety disorders.** Recurrent thoughts, avoidant behaviors, and repetitive requests for reassurance can also occur in anxiety disorders. However, the recurrent thoughts that are present in generalized anxiety disorder (i.e., worries) are usually about real-life concerns, whereas the obsessions of OCD usually do not involve real-life concerns and can include content that is odd, irrational, or of a seemingly magical nature; moreover, compulsions are often present and usually linked to the obsessions. Like individuals with OCD, individuals with specific phobia can have a fear reaction to specific objects or situations; however, in specific phobia the feared object is usually much more circumscribed, and rituals are not present. In social anxiety disorder (social phobia), the feared objects or situations are limited to social interactions, and avoidance or reassurance seeking is focused on reducing this social fear.

**Major depressive disorder.** OCD can be distinguished from the rumination of major depressive disorder, in which thoughts are usually mood-congruent and not necessarily experienced as intrusive or distressing; moreover, ruminations are not linked to compulsions, as is typical in OCD.

**Other obsessive-compulsive and related disorders.** In body dysmorphic disorder, the obsessions and compulsions are limited to concerns about physical appearance; and in trichotillomania (hair-pulling disorder), the compulsive behavior is limited to hair pulling in the absence of obsessions. Hoarding disorder symptoms focus exclusively on the persistent difficulty discarding or parting with possessions, marked distress associated with discarding items, and excessive accumulation of objects. However, if an individual has obsessions that are typical of OCD (e.g., concerns about incompleteness or harm), and these obsessions lead to compulsive hoarding behaviors (e.g., acquiring all objects in a set to attain a sense of completeness or not discarding old newspapers because they may contain information that could prevent harm), a diagnosis of OCD should be given instead.

**Eating disorders.** OCD can be distinguished from anorexia nervosa in that in OCD the obsessions and compulsions are not limited to concerns about weight and food.

**Tics (in tic disorder) and stereotyped movements.** A *tic* is a sudden, rapid, recurrent, nonrhythmic motor movement or vocalization (e.g., eye blinking, throat clearing). A *stereotyped movement* is a repetitive, seemingly driven, nonfunctional motor behavior (e.g., head banging, body rocking, self-biting). Tics and stereotyped movements are typically less complex than compulsions and are not aimed at neutralizing obsessions. However, distinguishing between complex tics and compulsions can be difficult. Whereas compulsions are usually preceded by obsessions, tics are often preceded by premonitory sensory urges. Some individuals have symptoms of both OCD and a tic disorder, in which case both diagnoses may be warranted.

**Psychotic disorders.** Some individuals with OCD have poor insight or even delusional OCD beliefs. However, they have obsessions and compulsions (distinguishing their condition from delusional disorder) and do not have other features of schizophrenia or schizoaffective disorder (e.g., hallucinations or formal thought disorder).

**Other compulsive-like behaviors.** Certain behaviors are sometimes described as “compulsive,” including sexual behavior (in the case of paraphilias), gambling (i.e., gambling



disorder), and substance use (e.g., alcohol use disorder). However, these behaviors differ from the compulsions of OCD in that the person usually derives pleasure from the activity and may wish to resist it only because of its deleterious consequences.

**Obsessive-compulsive personality disorder.** Although obsessive-compulsive personality disorder and OCD have similar names, the clinical manifestations of these disorders are quite different. Obsessive-compulsive personality disorder is not characterized by intrusive thoughts, images, or urges or by repetitive behaviors that are performed in response to these intrusions; instead, it involves an enduring and pervasive maladaptive pattern of excessive perfectionism and rigid control. If an individual manifests symptoms of both OCD and obsessive-compulsive personality disorder, both diagnoses can be given.

## Comorbidity

Individuals with OCD often have other psychopathology. Many adults with the disorder have a lifetime diagnosis of an anxiety disorder (76%; e.g., panic disorder, social anxiety disorder, generalized anxiety disorder, specific phobia) or a depressive or bipolar disorder (63% for any depressive or bipolar disorder, with the most common being major depressive disorder [41%]). Onset of OCD is usually later than for most comorbid anxiety disorders (with the exception of separation anxiety disorder) and PTSD but often precedes that of depressive disorders. Comorbid obsessive-compulsive personality disorder is also common in individuals with OCD (e.g., ranging from 23% to 32%).

Up to 30% of individuals with OCD also have a lifetime tic disorder. A comorbid tic disorder is most common in males with onset of OCD in childhood. These individuals tend to differ from those without a history of tic disorders in the themes of their OCD symptoms, comorbidity, course, and pattern of familial transmission. A triad of OCD, tic disorder, and attention-deficit/hyperactivity disorder can also be seen in children.

Disorders that occur more frequently in individuals with OCD than in those without the disorder include several obsessive-compulsive and related disorders such as body dysmorphic disorder, trichotillomania (hair-pulling disorder), and excoriation (skin-picking) disorder. Finally, an association between OCD and some disorders characterized by impulsivity, such as oppositional defiant disorder, has been reported.

OCD is also much more common in individuals with certain other disorders than would be expected based on its prevalence in the general population; when one of those other disorders is diagnosed, the individual should be assessed for OCD as well. For example, in individuals with schizophrenia or schizoaffective disorder, the prevalence of OCD is approximately 12%. Rates of OCD are also elevated in bipolar disorder; eating disorders, such as anorexia nervosa and bulimia nervosa; and Tourette's disorder.

## Body Dysmorphic Disorder

### Diagnostic Criteria

**300.7 (F45.22)**

- A. Preoccupation with one or more perceived defects or flaws in physical appearance that are not observable or appear slight to others.
- B. At some point during the course of the disorder, the individual has performed repetitive behaviors (e.g., mirror checking, excessive grooming, skin picking, reassurance seeking) or mental acts (e.g., comparing his or her appearance with that of others) in response to the appearance concerns.
- C. The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The appearance preoccupation is not better explained by concerns with body fat or weight in an individual whose symptoms meet diagnostic criteria for an eating disorder.

*Specify if:*

**With muscle dysmorphia:** The individual is preoccupied with the idea that his or her body build is too small or insufficiently muscular. This specifier is used even if the individual is preoccupied with other body areas, which is often the case.

*Specify if:*

Indicate degree of insight regarding body dysmorphic disorder beliefs (e.g., “I look ugly” or “I look deformed”).

**With good or fair insight:** The individual recognizes that the body dysmorphic disorder beliefs are definitely or probably not true or that they may or may not be true.

**With poor insight:** The individual thinks that the body dysmorphic disorder beliefs are probably true.

**With absent insight/delusional beliefs:** The individual is completely convinced that the body dysmorphic disorder beliefs are true.

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## Diagnostic Features

Individuals with body dysmorphic disorder (formerly known as *dysmorphophobia*) are preoccupied with one or more perceived defects or flaws in their physical appearance, which they believe look ugly, unattractive, abnormal, or deformed (Criterion A). The perceived flaws are not observable or appear only slight to other individuals. Concerns range from looking “unattractive” or “not right” to looking “hideous” or “like a monster.” Preoccupations can focus on one or many body areas, most commonly the skin (e.g., perceived acne, scars, lines, wrinkles, paleness), hair (e.g., “thinning” hair or “excessive” body or facial hair), or nose (e.g., size or shape). However, any body area can be the focus of concern (e.g., eyes, teeth, weight, stomach, breasts, legs, face size or shape, lips, chin, eyebrows, genitals). Some individuals are concerned about perceived asymmetry of body areas. The preoccupations are intrusive, unwanted, time-consuming (occurring, on average, 3–8 hours per day), and usually difficult to resist or control.

Excessive repetitive behaviors or mental acts (e.g., comparing) are performed in response to the preoccupation (Criterion B). The individual feels driven to perform these behaviors, which are not pleasurable and may increase anxiety and dysphoria. They are typically time-consuming and difficult to resist or control. Common behaviors are comparing one’s appearance with that of other individuals; repeatedly checking perceived defects in mirrors or other reflecting surfaces or examining them directly; excessively grooming (e.g., combing, styling, shaving, plucking, or pulling hair); camouflaging (e.g., repeatedly applying makeup or covering disliked areas with such things as a hat, clothing, makeup, or hair); seeking reassurance about how the perceived flaws look; touching disliked areas to check them; excessively exercising or weight lifting; and seeking cosmetic procedures. Some individuals excessively tan (e.g., to darken “pale” skin or diminish perceived acne), repeatedly change their clothes (e.g., to camouflage perceived defects), or compulsively shop (e.g., for beauty products). Compulsive skin picking intended to improve perceived skin defects is common and can cause skin damage, infections, or ruptured blood vessels. The preoccupation must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning (Criterion C); usually both are present. Body dysmorphic disorder must be differentiated from an eating disorder.

*Muscle dysmorphia*, a form of body dysmorphic disorder occurring almost exclusively in males, consists of preoccupation with the idea that one’s body is too small or insufficiently lean or muscular. Individuals with this form of the disorder actually have a normal-looking body or are even very muscular. They may also be preoccupied with other body areas, such as skin or hair. A majority (but not all) diet, exercise, and/or lift weights excessively, sometimes causing bodily damage. Some use potentially dangerous anabolic-

androgenic steroids and other substances to try to make their body bigger and more muscular. Body dysmorphic disorder by proxy is a form of body dysmorphic disorder in which individuals are preoccupied with defects they perceive in another person's appearance.

Insight regarding body dysmorphic disorder beliefs can range from good to absent/delusional (i.e., delusional beliefs consisting of complete conviction that the individual's view of their appearance is accurate and undistorted). On average, insight is poor; one-third or more of individuals currently have delusional body dysmorphic disorder beliefs. Individuals with delusional body dysmorphic disorder tend to have greater morbidity in some areas (e.g., suicidality), but this appears accounted for by their tendency to have more severe body dysmorphic disorder symptoms.

## **Associated Features Supporting Diagnosis**

Many individuals with body dysmorphic disorder have ideas or delusions of reference, believing that other people take special notice of them or mock them because of how they look. Body dysmorphic disorder is associated with high levels of anxiety, social anxiety, social avoidance, depressed mood, neuroticism, and perfectionism as well as low extroversion and low self-esteem. Many individuals are ashamed of their appearance and their excessive focus on how they look, and are reluctant to reveal their concerns to others. A majority of individuals receive cosmetic treatment to try to improve their perceived defects. Dermatological treatment and surgery are most common, but any type (e.g., dental, electrolysis) may be received. Occasionally, individuals may perform surgery on themselves. Body dysmorphic disorder appears to respond poorly to such treatments and sometimes becomes worse. Some individuals take legal action or are violent toward the clinician because they are dissatisfied with the cosmetic outcome.

Body dysmorphic disorder has been associated with executive dysfunction and visual processing abnormalities, with a bias for analyzing and encoding details rather than holistic or configural aspects of visual stimuli. Individuals with this disorder tend to have a bias for negative and threatening interpretations of facial expressions and ambiguous scenarios.

## **Prevalence**

The point prevalence among U.S. adults is 2.4% (2.5% in females and 2.2% in males). Outside the United States (i.e., Germany), current prevalence is approximately 1.7%–1.8%, with a gender distribution similar to that in the United States. The current prevalence is 9%–15% among dermatology patients, 7%–8% among U.S. cosmetic surgery patients, 3%–16% among international cosmetic surgery patients (most studies), 8% among adult orthodontia patients, and 10% among patients presenting for oral or maxillofacial surgery.

## **Development and Course**

The mean age at disorder onset is 16–17 years, the median age at onset is 15 years, and the most common age at onset is 12–13 years. Two-thirds of individuals have disorder onset before age 18. Subclinical body dysmorphic disorder symptoms begin, on average, at age 12 or 13 years. Subclinical concerns usually evolve gradually to the full disorder, although some individuals experience abrupt onset of body dysmorphic disorder. The disorder appears to usually be chronic, although improvement is likely when evidence-based treatment is received. The disorder's clinical features appear largely similar in children/adolescents and adults. Body dysmorphic disorder occurs in the elderly, but little is known about the disorder in this age group. Individuals with disorder onset before age 18 years are more likely to attempt suicide, have more comorbidity, and have gradual (rather than acute) disorder onset than those with adult-onset body dysmorphic disorder.

## Risk and Prognostic Factors

**Environmental.** Body dysmorphic disorder has been associated with high rates of childhood neglect and abuse.

**Genetic and physiological.** The prevalence of body dysmorphic disorder is elevated in first-degree relatives of individuals with obsessive-compulsive disorder (OCD).

## Culture-Related Diagnostic Issues

Body dysmorphic disorder has been reported internationally. It appears that the disorder may have more similarities than differences across races and cultures but that cultural values and preferences may influence symptom content to some degree. *Taijin kyofusho*, included in the traditional Japanese diagnostic system, has a subtype similar to body dysmorphic disorder: *shubo-kyofu* ("the phobia of a deformed body").

## Gender-Related Diagnostic Issues

Females and males appear to have more similarities than differences in terms of most clinical features— for example, disliked body areas, types of repetitive behaviors, symptom severity, suicidality, comorbidity, illness course, and receipt of cosmetic procedures for body dysmorphic disorder. However, males are more likely to have genital preoccupations, and females are more likely to have a comorbid eating disorder. Muscle dysmorphia occurs almost exclusively in males.

## Suicide Risk

Rates of suicidal ideation and suicide attempts are high in both adults and children/adolescents with body dysmorphic disorder. Furthermore, risk for suicide appears high in adolescents. A substantial proportion of individuals attribute suicidal ideation or suicide attempts primarily to their appearance concerns. Individuals with body dysmorphic disorder have many risk factors for completed suicide, such as high rates of suicidal ideation and suicide attempts, demographic characteristics associated with suicide, and high rates of comorbid major depressive disorder.

## Functional Consequences of Body Dysmorphic Disorder

Nearly all individuals with body dysmorphic disorder experience impaired psychosocial functioning because of their appearance concerns. Impairment can range from moderate (e.g., avoidance of some social situations) to extreme and incapacitating (e.g., being completely housebound). On average, psychosocial functioning and quality of life are markedly poor. More severe body dysmorphic disorder symptoms are associated with poorer functioning and quality of life. Most individuals experience impairment in their job, academic, or role functioning (e.g., as a parent or caregiver), which is often severe (e.g., performing poorly, missing school or work, not working). About 20% of youths with body dysmorphic disorder report dropping out of school primarily because of their body dysmorphic disorder symptoms. Impairment in social functioning (e.g., social activities, relationships, intimacy), including avoidance, is common. Individuals may be housebound because of their body dysmorphic disorder symptoms, sometimes for years. A high proportion of adults and adolescents have been psychiatrically hospitalized.

## Differential Diagnosis

**Normal appearance concerns and clearly noticeable physical defects.** Body dysmorphic disorder differs from normal appearance concerns in being characterized by exces-

sive appearance-related preoccupations and repetitive behaviors that are time-consuming, are usually difficult to resist or control, and cause clinically significant distress or impairment in functioning. Physical defects that are clearly noticeable (i.e., not slight) are not diagnosed as body dysmorphic disorder. However, skin picking as a symptom of body dysmorphic disorder can cause noticeable skin lesions and scarring; in such cases, body dysmorphic disorder should be diagnosed.

**Eating disorders.** In an individual with an eating disorder, concerns about being fat are considered a symptom of the eating disorder rather than body dysmorphic disorder. However, weight concerns may occur in body dysmorphic disorder. Eating disorders and body dysmorphic disorder can be comorbid, in which case both should be diagnosed.

**Other obsessive-compulsive and related disorders.** The preoccupations and repetitive behaviors of body dysmorphic disorder differ from obsessions and compulsions in OCD in that the former focus only on appearance. These disorders have other differences, such as poorer insight in body dysmorphic disorder. When skin picking is intended to improve the appearance of perceived skin defects, body dysmorphic disorder, rather than excoriation (skin-picking) disorder, is diagnosed. When hair removal (plucking, pulling, or other types of removal) is intended to improve perceived defects in the appearance of facial or body hair, body dysmorphic disorder is diagnosed rather than trichotillomania (hair-pulling disorder).

**Illness anxiety disorder.** Individuals with body dysmorphic disorder are not preoccupied with having or acquiring a serious illness and do not have particularly elevated levels of somatization.

**Major depressive disorder.** The prominent preoccupation with appearance and excessive repetitive behaviors in body dysmorphic disorder differentiate it from major depressive disorder. However, major depressive disorder and depressive symptoms are common in individuals with body dysmorphic disorder, often appearing to be secondary to the distress and impairment that body dysmorphic disorder causes. Body dysmorphic disorder should be diagnosed in depressed individuals if diagnostic criteria for body dysmorphic disorder are met.

**Anxiety disorders.** Social anxiety and avoidance are common in body dysmorphic disorder. However, unlike social anxiety disorder (social phobia), agoraphobia, and avoidant personality disorder, body dysmorphic disorder includes prominent appearance-related preoccupation, which may be delusional, and repetitive behaviors, and the social anxiety and avoidance are due to concerns about perceived appearance defects and the belief or fear that other people will consider these individuals ugly, ridicule them, or reject them because of their physical features. Unlike generalized anxiety disorder, anxiety and worry in body dysmorphic disorder focus on perceived appearance flaws.

**Psychotic disorders.** Many individuals with body dysmorphic disorder have delusional appearance beliefs (i.e., complete conviction that their view of their perceived defects is accurate), which is diagnosed as body dysmorphic disorder, with absent insight/delusional beliefs, not as delusional disorder. Appearance-related ideas or delusions of reference are common in body dysmorphic disorder; however, unlike schizophrenia or schizoaffective disorder, body dysmorphic disorder involves prominent appearance preoccupations and related repetitive behaviors, and disorganized behavior and other psychotic symptoms are absent (except for appearance beliefs, which may be delusional).

**Other disorders and symptoms.** Body dysmorphic disorder should not be diagnosed if the preoccupation is limited to discomfort with or a desire to be rid of one's primary and/or secondary sex characteristics in an individual with gender dysphoria or if the preoccupation focuses on the belief that one emits a foul or offensive body odor as in olfactory reference syndrome (which is not a DSM-5 disorder). Body identity integrity disorder

(apotemnophilia) (which is not a DSM-5 disorder) involves a desire to have a limb amputated to correct an experience of mismatch between a person's sense of body identity and his or her actual anatomy. However, the concern does not focus on the limb's appearance, as it would in body dysmorphic disorder. *Koro*, a culturally related disorder that usually occurs in epidemics in Southeastern Asia, consists of a fear that the penis (labia, nipples, or breasts in females) is shrinking or retracting and will disappear into the abdomen, often accompanied by a belief that death will result. *Koro* differs from body dysmorphic disorder in several ways, including a focus on death rather than preoccupation with perceived ugliness. *Dysmorphic concern* (which is not a DSM-5 disorder) is a much broader construct than, and is not equivalent to, body dysmorphic disorder. It involves symptoms reflecting an overconcern with slight or imagined flaws in appearance.

## Comorbidity

Major depressive disorder is the most common comorbid disorder, with onset usually after that of body dysmorphic disorder. Comorbid social anxiety disorder (social phobia), OCD, and substance-related disorders are also common.

## Hoarding Disorder

### Diagnostic Criteria

**300.3 (F42)**

- A. Persistent difficulty discarding or parting with possessions, regardless of their actual value.
- B. This difficulty is due to a perceived need to save the items and to distress associated with discarding them.
- C. The difficulty discarding possessions results in the accumulation of possessions that congest and clutter active living areas and substantially compromises their intended use. If living areas are uncluttered, it is only because of the interventions of third parties (e.g., family members, cleaners, authorities).
- D. The hoarding causes clinically significant distress or impairment in social, occupational, or other important areas of functioning (including maintaining a safe environment for self and others).
- E. The hoarding is not attributable to another medical condition (e.g., brain injury, cerebrovascular disease, Prader-Willi syndrome).
- F. The hoarding is not better explained by the symptoms of another mental disorder (e.g., obsessions in obsessive-compulsive disorder, decreased energy in major depressive disorder, delusions in schizophrenia or another psychotic disorder, cognitive deficits in major neurocognitive disorder, restricted interests in autism spectrum disorder).

*Specify if:*

**With excessive acquisition:** If difficulty discarding possessions is accompanied by excessive acquisition of items that are not needed or for which there is no available space.

*Specify if:*

**With good or fair insight:** The individual recognizes that hoarding-related beliefs and behaviors (pertaining to difficulty discarding items, clutter, or excessive acquisition) are problematic.

**With poor insight:** The individual is mostly convinced that hoarding-related beliefs and behaviors (pertaining to difficulty discarding items, clutter, or excessive acquisition) are not problematic despite evidence to the contrary.

**With absent insight/delusional beliefs:** The individual is completely convinced that hoarding-related beliefs and behaviors (pertaining to difficulty discarding items, clutter, or excessive acquisition) are not problematic despite evidence to the contrary.

## Specifiers

**With excessive acquisition.** Approximately 80%–90% of individuals with hoarding disorder display excessive acquisition. The most frequent form of acquisition is excessive buying, followed by acquisition of free items (e.g., leaflets, items discarded by others). Stealing is less common. Some individuals may deny excessive acquisition when first assessed, yet it may appear later during the course of treatment. Individuals with hoarding disorder typically experience distress if they are unable to or are prevented from acquiring items.

## Diagnostic Features

The essential feature of hoarding disorder is persistent difficulties discarding or parting with possessions, regardless of their actual value (Criterion A). The term *persistent* indicates a long-standing difficulty rather than more transient life circumstances that may lead to excessive clutter, such as inheriting property. The difficulty in discarding possessions noted in Criterion A refers to any form of discarding, including throwing away, selling, giving away, or recycling. The main reasons given for these difficulties are the perceived utility or aesthetic value of the items or strong sentimental attachment to the possessions. Some individuals feel responsible for the fate of their possessions and often go to great lengths to avoid being wasteful. Fears of losing important information are also common. The most commonly saved items are newspapers, magazines, old clothing, bags, books, mail, and paperwork, but virtually any item can be saved. The nature of items is not limited to possessions that most other people would define as useless or of limited value. Many individuals collect and save large numbers of valuable things as well, which are often found in piles mixed with other less valuable items.

Individuals with hoarding disorder purposefully save possessions and experience distress when facing the prospect of discarding them (Criterion B). This criterion emphasizes that the saving of possessions is intentional, which discriminates hoarding disorder from other forms of psychopathology that are characterized by the passive accumulation of items or the absence of distress when possessions are removed.

Individuals accumulate large numbers of items that fill up and clutter active living areas to the extent that their intended use is no longer possible (Criterion C). For example, the individual may not be able to cook in the kitchen, sleep in his or her bed, or sit in a chair. If the space can be used, it is only with great difficulty. *Clutter* is defined as a large group of usually unrelated or marginally related objects piled together in a disorganized fashion in spaces designed for other purposes (e.g., tabletops, floor, hallway). Criterion C emphasizes the “active” living areas of the home, rather than more peripheral areas, such as garages, attics, or basements, that are sometimes cluttered in homes of individuals without hoarding disorder. However, individuals with hoarding disorder often have possessions that spill beyond the active living areas and can occupy and impair the use of other spaces, such as vehicles, yards, the workplace, and friends’ and relatives’ houses. In some cases, living areas may be uncluttered because of the intervention of third parties (e.g., family members, cleaners, local authorities). Individuals who have been forced to clear their homes still have a symptom picture that meets criteria for hoarding disorder because the lack of clutter is due to a third-party intervention. Hoarding disorder contrasts with normative collecting behavior, which is organized and systematic, even if in some cases the actual amount of possessions may be similar to the amount accumulated by an individual with hoarding disorder. Normative collecting does not produce the clutter, distress, or impairment typical of hoarding disorder.

Symptoms (i.e., difficulties discarding and/or clutter) must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning, including maintaining a safe environment for self and others (Criterion D). In some cases,

particularly when there is poor insight, the individual may not report distress, and the impairment may be apparent only to those around the individual. However, any attempts to discard or clear the possessions by third parties result in high levels of distress.

## Associated Features Supporting Diagnosis

Other common features of hoarding disorder include indecisiveness, perfectionism, avoidance, procrastination, difficulty planning and organizing tasks, and distractibility. Some individuals with hoarding disorder live in unsanitary conditions that may be a logical consequence of severely cluttered spaces and/or that are related to planning and organizing difficulties. *Animal hoarding* can be defined as the accumulation of a large number of animals and a failure to provide minimal standards of nutrition, sanitation, and veterinary care and to act on the deteriorating condition of the animals (including disease, starvation, or death) and the environment (e.g., severe overcrowding, extremely unsanitary conditions). Animal hoarding may be a special manifestation of hoarding disorder. Most individuals who hoard animals also hoard inanimate objects. The most prominent differences between animal and object hoarding are the extent of unsanitary conditions and the poorer insight in animal hoarding.

## Prevalence

Nationally representative prevalence studies of hoarding disorder are not available. Community surveys estimate the point prevalence of clinically significant hoarding in the United States and Europe to be approximately 2%–6%. Hoarding disorder affects both males and females, but some epidemiological studies have reported a significantly greater prevalence among males. This contrasts with clinical samples, which are predominantly female. Hoarding symptoms appear to be almost three times more prevalent in older adults (ages 55–94 years) compared with younger adults (ages 34–44 years).

## Development and Course

Hoarding appears to begin early in life and spans well into the late stages. Hoarding symptoms may first emerge around ages 11–15 years, start interfering with the individual's everyday functioning by the mid-20s, and cause clinically significant impairment by the mid-30s. Participants in clinical research studies are usually in their 50s. Thus, the severity of hoarding increases with each decade of life. Once symptoms begin, the course of hoarding is often chronic, with few individuals reporting a waxing and waning course.

Pathological hoarding in children appears to be easily distinguished from developmentally adaptive saving and collecting behaviors. Because children and adolescents typically do not control their living environment and discarding behaviors, the possible intervention of third parties (e.g., parents keeping the spaces usable and thus reducing interference) should be considered when making the diagnosis.

## Risk and Prognostic Factors

**Temperamental.** Indecisiveness is a prominent feature of individuals with hoarding disorder and their first-degree relatives.

**Environmental.** Individuals with hoarding disorder often retrospectively report stressful and traumatic life events preceding the onset of the disorder or causing an exacerbation.

**Genetic and physiological.** Hoarding behavior is familial, with about 50% of individuals who hoard reporting having a relative who also hoards. Twin studies indicate that approximately 50% of the variability in hoarding behavior is attributable to additive genetic factors.



## Culture-Related Diagnostic Issues

While most of the research has been done in Western, industrialized countries and urban communities, the available data from non-Western and developing countries suggest that hoarding is a universal phenomenon with consistent clinical features.

## Gender-Related Diagnostic Issues

The key features of hoarding disorder (i.e., difficulties discarding, excessive amount of clutter) are generally comparable in males and females, but females tend to display more excessive acquisition, particularly excessive buying, than do males.

## Functional Consequences of Hoarding Disorder

Clutter impairs basic activities, such as moving through the house, cooking, cleaning, personal hygiene, and even sleeping. Appliances may be broken, and utilities such as water and electricity may be disconnected, as access for repair work may be difficult. Quality of life is often considerably impaired. In severe cases, hoarding can put individuals at risk for fire, falling (especially elderly individuals), poor sanitation, and other health risks. Hoarding disorder is associated with occupational impairment, poor physical health, and high social service utilization. Family relationships are frequently under great strain. Conflict with neighbors and local authorities is common, and a substantial proportion of individuals with severe hoarding disorder have been involved in legal eviction proceedings, and some have a history of eviction.

## Differential Diagnosis

**Other medical conditions.** Hoarding disorder is not diagnosed if the symptoms are judged to be a direct consequence of another medical condition (Criterion E), such as traumatic brain injury, surgical resection for treatment of a tumor or seizure control, cerebrovascular disease, infections of the central nervous system (e.g., herpes simplex encephalitis), or neurogenetic conditions such as Prader-Willi syndrome. Damage to the anterior ventromedial prefrontal and cingulate cortices has been particularly associated with the excessive accumulation of objects. In these individuals, the hoarding behavior is not present prior to the onset of the brain damage and appears shortly after the brain damage occurs. Some of these individuals appear to have little interest in the accumulated items and are able to discard them easily or do not care if others discard them, whereas others appear to be very reluctant to discard anything.

**Neurodevelopmental disorders.** Hoarding disorder is not diagnosed if the accumulation of objects is judged to be a direct consequence of a neurodevelopmental disorder, such as autism spectrum disorder or intellectual disability (intellectual developmental disorder).

**Schizophrenia spectrum and other psychotic disorders.** Hoarding disorder is not diagnosed if the accumulation of objects is judged to be a direct consequence of delusions or negative symptoms in schizophrenia spectrum and other psychotic disorders.

**Major depressive episode.** Hoarding disorder is not diagnosed if the accumulation of objects is judged to be a direct consequence of psychomotor retardation, fatigue, or loss of energy during a major depressive episode.

**Obsessive-compulsive disorder.** Hoarding disorder is not diagnosed if the symptoms are judged to be a direct consequence of typical obsessions or compulsions, such as fears of contamination, harm, or feelings of incompleteness in obsessive-compulsive disorder (OCD). Feelings of incompleteness (e.g., losing one's identity, or having to document and preserve all life experiences) are the most frequent OCD symptoms associated with this form of hoarding. The accumulation of objects can also be the result of persistently avoid-

ing onerous rituals (e.g., not discarding objects in order to avoid endless washing or checking rituals).

In OCD, the behavior is generally unwanted and highly distressing, and the individual experiences no pleasure or reward from it. Excessive acquisition is usually not present; if excessive acquisition is present, items are acquired because of a specific obsession (e.g., the need to buy items that have been accidentally touched in order to avoid contaminating other people), not because of a genuine desire to possess the items. Individuals who hoard in the context of OCD are also more likely to accumulate bizarre items, such as trash, feces, urine, nails, hair, used diapers, or rotten food. Accumulation of such items is very unusual in hoarding disorder.

When severe hoarding appears concurrently with other typical symptoms of OCD but is judged to be independent from these symptoms, both hoarding disorder and OCD may be diagnosed.

**Neurocognitive disorders.** Hoarding disorder is not diagnosed if the accumulation of objects is judged to be a direct consequence of a degenerative disorder, such as neurocognitive disorder associated with frontotemporal lobar degeneration or Alzheimer's disease. Typically, onset of the accumulating behavior is gradual and follows onset of the neurocognitive disorder. The accumulating behavior may be accompanied by self-neglect and severe domestic squalor, alongside other neuropsychiatric symptoms, such as disinhibition, gambling, rituals/stereotypies, tics, and self-injurious behaviors.

Comorbidity

Approximately 75% of individuals with hoarding disorder have a comorbid mood or anxiety disorder. The most common comorbid conditions are major depressive disorder (up to 50% of cases), social anxiety disorder (social phobia), and generalized anxiety disorder. Approximately 20% of individuals with hoarding disorder also have symptoms that meet diagnostic criteria for OCD. These comorbidities may often be the main reason for consultation, because individuals are unlikely to spontaneously report hoarding symptoms, and these symptoms are often not asked about in routine clinical interviews.

Trichotillomania (Hair-Pulling Disorder)

Diagnostic Criteria	312.39 (F63.2)
<p>A. Recurrent pulling out of one's hair, resulting in hair loss.</p> <p>B. Repeated attempts to decrease or stop hair pulling.</p> <p>C. The hair pulling causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.</p> <p>D. The hair pulling or hair loss is not attributable to another medical condition (e.g., a dermatological condition).</p> <p>E. The hair pulling is not better explained by the symptoms of another mental disorder (e.g., attempts to improve a perceived defect or flaw in appearance in body dysmorphic disorder).</p>	

Diagnostic Features

The essential feature of trichotillomania (hair-pulling disorder) is the recurrent pulling out of one's own hair (Criterion A). Hair pulling may occur from any region of the body in which hair grows; the most common sites are the scalp, eyebrows, and eyelids, while less common sites are axillary, facial, pubic, and peri-rectal regions. Hair-pulling sites may vary over time. Hair pulling may occur in brief episodes scattered throughout the day or during less frequent but more sustained periods that can continue for hours, and such hair

pulling may endure for months or years. Criterion A requires that hair pulling lead to hair loss, although individuals with this disorder may pull hair in a widely distributed pattern (i.e., pulling single hairs from all over a site) such that hair loss may not be clearly visible. Alternatively, individuals may attempt to conceal or camouflage hair loss (e.g., by using makeup, scarves, or wigs). Individuals with trichotillomania have made repeated attempts to decrease or stop hair pulling (Criterion B). Criterion C indicates that hair pulling causes clinically significant distress or impairment in social, occupational, or other important areas of functioning. The term *distress* includes negative affects that may be experienced by individuals with hair pulling, such as feeling a loss of control, embarrassment, and shame. Significant impairment may occur in several different areas of functioning (e.g., social, occupational, academic, and leisure), in part because of avoidance of work, school, or other public situations.

## Associated Features Supporting Diagnosis

Hair pulling may be accompanied by a range of behaviors or rituals involving hair. Thus, individuals may search for a particular kind of hair to pull (e.g., hairs with a specific texture or color), may try to pull out hair in a specific way (e.g., so that the root comes out intact), or may visually examine or tactilely or orally manipulate the hair after it has been pulled (e.g., rolling the hair between the fingers, pulling the strand between the teeth, biting the hair into pieces, or swallowing the hair).

Hair pulling may also be preceded or accompanied by various emotional states; it may be triggered by feelings of anxiety or boredom, may be preceded by an increasing sense of tension (either immediately before pulling out the hair or when attempting to resist the urge to pull), or may lead to gratification, pleasure, or a sense of relief when the hair is pulled out. Hair-pulling behavior may involve varying degrees of conscious awareness, with some individuals displaying more focused attention on the hair pulling (with preceding tension and subsequent relief), and other individuals displaying more automatic behavior (in which the hair pulling seems to occur without full awareness). Many individuals report a mix of both behavioral styles. Some individuals experience an "itch-like" or tingling sensation in the scalp that is alleviated by the act of pulling hair. Pain does not usually accompany hair pulling.

Patterns of hair loss are highly variable. Areas of complete alopecia, as well as areas of thinned hair density, are common. When the scalp is involved, there may be a predilection for pulling out hair in the crown or parietal regions. There may be a pattern of nearly complete baldness except for a narrow perimeter around the outer margins of the scalp, particularly at the nape of the neck ("tonsure trichotillomania"). Eyebrows and eyelashes may be completely absent.

Hair pulling does not usually occur in the presence of other individuals, except immediate family members. Some individuals have urges to pull hair from other individuals and may sometimes try to find opportunities to do so surreptitiously. Some individuals may pull hairs from pets, dolls, and other fibrous materials (e.g., sweaters or carpets). Some individuals may deny their hair pulling to others. The majority of individuals with trichotillomania also have one or more other body-focused repetitive behaviors, including skin picking, nail biting, and lip chewing.

## Prevalence

In the general population, the 12-month prevalence estimate for trichotillomania in adults and adolescents is 1%–2%. Females are more frequently affected than males, at a ratio of approximately 10:1. This estimate likely reflects the true gender ratio of the condition, although it may also reflect differential treatment seeking based on gender or cultural attitudes regarding appearance (e.g., acceptance of normative hair loss among males). Among children with trichotillomania, males and females are more equally represented.

## Development and Course

Hair pulling may be seen in infants, and this behavior typically resolves during early development. Onset of hair pulling in trichotillomania most commonly coincides with, or follows the onset of, puberty. Sites of hair pulling may vary over time. The usual course of trichotillomania is chronic, with some waxing and waning if the disorder is untreated. Symptoms may possibly worsen in females accompanying hormonal changes (e.g., menstruation, perimenopause). For some individuals, the disorder may come and go for weeks, months, or years at a time. A minority of individuals remit without subsequent relapse within a few years of onset.

## Risk and Prognostic Factors

**Genetic and physiological.** There is evidence for a genetic vulnerability to trichotillomania. The disorder is more common in individuals with obsessive-compulsive disorder (OCD) and their first-degree relatives than in the general population.

## Culture-Related Diagnostic Issues

Trichotillomania appears to manifest similarly across cultures, although there is a paucity of data from non-Western regions.

## Diagnostic Markers

Most individuals with trichotillomania admit to hair pulling; thus, dermatopathological diagnosis is rarely required. Skin biopsy and dermoscopy (or trichoscopy) of trichotillomania are able to differentiate the disorder from other causes of alopecia. In trichotillomania, dermoscopy shows a range of characteristic features, including decreased hair density, short vellus hair, and broken hairs with different shaft lengths.

## Functional Consequences of Trichotillomania (Hair-Pulling Disorder)

Trichotillomania is associated with distress as well as with social and occupational impairment. There may be irreversible damage to hair growth and hair quality. Infrequent medical consequences of trichotillomania include digit purpura, musculoskeletal injury (e.g., carpal tunnel syndrome; back, shoulder and neck pain), blepharitis, and dental damage (e.g., worn or broken teeth due to hair biting). Swallowing of hair (trichophagia) may lead to trichobezoars, with subsequent anemia, abdominal pain, hematemesis, nausea and vomiting, bowel obstruction, and even perforation.

## Differential Diagnosis

**Normative hair removal/manipulation.** Trichotillomania should not be diagnosed when hair removal is performed solely for cosmetic reasons (i.e., to improve one's physical appearance). Many individuals twist and play with their hair, but this behavior does not usually qualify for a diagnosis of trichotillomania. Some individuals may bite rather than pull hair; again, this does not qualify for a diagnosis of trichotillomania.

**Other obsessive-compulsive and related disorders.** Individuals with OCD and symmetry concerns may pull out hairs as part of their symmetry rituals, and individuals with body dysmorphic disorder may remove body hair that they perceive as ugly, asymmetrical, or abnormal; in such cases a diagnosis of trichotillomania is not given. The description of body-focused repetitive behavior disorder in other specified obsessive-compulsive and related disorder excludes individuals who meet diagnostic criteria for trichotillomania.

**Neurodevelopmental disorders.** In neurodevelopmental disorders, hair pulling may meet the definition of stereotypies (e.g., in stereotypic movement disorder). Tics (in tic disorders) rarely lead to hair pulling.

**Psychotic disorder.** Individuals with a psychotic disorder may remove hair in response to a delusion or hallucination. Trichotillomania is not diagnosed in such cases.

**Another medical condition.** Trichotillomania is not diagnosed if the hair pulling or hair loss is attributable to another medical condition (e.g., inflammation of the skin or other dermatological conditions). Other causes of scarring alopecia (e.g., alopecia areata, androgenic alopecia, telogen effluvium) or nonscarring alopecia (e.g., chronic discoid lupus erythematosus, lichen planopilaris, central centrifugal cicatricial alopecia, pseudopelade, folliculitis decalvans, dissecting folliculitis, acne keloidalis nuchae) should be considered in individuals with hair loss who deny hair pulling. Skin biopsy or dermoscopy can be used to differentiate individuals with trichotillomania from those with dermatological disorders.

**Substance-related disorders.** Hair-pulling symptoms may be exacerbated by certain substances—for example, stimulants—but it is less likely that substances are the primary cause of persistent hair pulling.

## Comorbidity

Trichotillomania is often accompanied by other mental disorders, most commonly major depressive disorder and excoriation (skin-picking) disorder. Repetitive body-focused symptoms other than hair pulling or skin picking (e.g. nail biting) occur in the majority of individuals with trichotillomania and may deserve an additional diagnosis of other specified obsessive-compulsive and related disorder (i.e., body-focused repetitive behavior disorder).

## Excoriation (Skin-Picking) Disorder

### Diagnostic Criteria

**698.4 (L98.1)**

- A. Recurrent skin picking resulting in skin lesions.
- B. Repeated attempts to decrease or stop skin picking.
- C. The skin picking causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The skin picking is not attributable to the physiological effects of a substance (e.g., cocaine) or another medical condition (e.g., scabies).
- E. The skin picking is not better explained by symptoms of another mental disorder (e.g., delusions or tactile hallucinations in a psychotic disorder, attempts to improve a perceived defect or flaw in appearance in body dysmorphic disorder, stereotypies in stereotypic movement disorder, or intention to harm oneself in nonsuicidal self-injury).

## Diagnostic Features

The essential feature of excoriation (skin-picking) disorder is recurrent picking at one's own skin (Criterion A). The most commonly picked sites are the face, arms, and hands, but many individuals pick from multiple body sites. Individuals may pick at healthy skin, at minor skin irregularities, at lesions such as pimples or calluses, or at scabs from previous picking. Most individuals pick with their fingernails, although many use tweezers, pins, or other objects. In addition to skin picking, there may be skin rubbing, squeezing, lancing, and biting. Individuals with excoriation disorder often spend significant amounts of time on their picking behavior, sometimes several hours per day, and such skin picking may

## Posttraumatic Stress Disorder

### Diagnostic Criteria

**309.81 (F43.10)**

#### Posttraumatic Stress Disorder

**Note:** The following criteria apply to adults, adolescents, and children older than 6 years. For children 6 years and younger, see corresponding criteria below.

A. Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:

1. Directly experiencing the traumatic event(s).
2. Witnessing, in person, the event(s) as it occurred to others.
3. Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.
4. Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse).

**Note:** Criterion A4 does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.

B. Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:

1. Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s).

**Note:** In children older than 6 years, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.

2. Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic event(s).

**Note:** In children, there may be frightening dreams without recognizable content.

3. Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.)

**Note:** In children, trauma-specific reenactment may occur in play.

4. Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

5. Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

C. Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following:

1. Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
2. Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).

D. Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

1. Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs).

2. Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., "I am bad," "No one can be trusted," "The world is completely dangerous," "My whole nervous system is permanently ruined").
  3. Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others.
  4. Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame).
  5. Markedly diminished interest or participation in significant activities.
  6. Feelings of detachment or estrangement from others.
  7. Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).
- E. Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:
1. Irritable behavior and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects.
  2. Reckless or self-destructive behavior.
  3. Hypervigilance.
  4. Exaggerated startle response.
  5. Problems with concentration.
  6. Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).
- F. Duration of the disturbance (Criteria B, C, D, and E) is more than 1 month.
- G. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- H. The disturbance is not attributable to the physiological effects of a substance (e.g., medication, alcohol) or another medical condition.

*Specify whether:*

**With dissociative symptoms:** The individual's symptoms meet the criteria for post-traumatic stress disorder, and in addition, in response to the stressor, the individual experiences persistent or recurrent symptoms of either of the following:

1. **Depersonalization:** Persistent or recurrent experiences of feeling detached from, and as if one were an outside observer of, one's mental processes or body (e.g., feeling as though one were in a dream; feeling a sense of unreality of self or body or of time moving slowly).
2. **Derealization:** Persistent or recurrent experiences of unreality of surroundings (e.g., the world around the individual is experienced as unreal, dreamlike, distant, or distorted).

**Note:** To use this subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (e.g., blackouts, behavior during alcohol intoxication) or another medical condition (e.g., complex partial seizures).

*Specify if:*

**With delayed expression:** If the full diagnostic criteria are not met until at least 6 months after the event (although the onset and expression of some symptoms may be immediate).

### **Posttraumatic Stress Disorder for Children 6 Years and Younger**

- A. In children 6 years and younger, exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:
1. Directly experiencing the traumatic event(s).
  2. Witnessing, in person, the event(s) as it occurred to others, especially primary caregivers.

**Note:** Witnessing does not include events that are witnessed only in electronic media, television, movies, or pictures.

3. Learning that the traumatic event(s) occurred to a parent or caregiving figure.

**B.** Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:

1. Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s).

**Note:** Spontaneous and intrusive memories may not necessarily appear distressing and may be expressed as play reenactment.

2. Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic event(s).

**Note:** It may not be possible to ascertain that the frightening content is related to the traumatic event.

3. Dissociative reactions (e.g., flashbacks) in which the child feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.) Such trauma-specific reenactment may occur in play.

4. Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

5. Marked physiological reactions to reminders of the traumatic event(s).

**C.** One (or more) of the following symptoms, representing either persistent avoidance of stimuli associated with the traumatic event(s) or negative alterations in cognitions and mood associated with the traumatic event(s), must be present, beginning after the event(s) or worsening after the event(s):

**Persistent Avoidance of Stimuli**

1. Avoidance of or efforts to avoid activities, places, or physical reminders that arouse recollections of the traumatic event(s).
2. Avoidance of or efforts to avoid people, conversations, or interpersonal situations that arouse recollections of the traumatic event(s).

**Negative Alterations in Cognitions**

3. Substantially increased frequency of negative emotional states (e.g., fear, guilt, sadness, shame, confusion).
4. Markedly diminished interest or participation in significant activities, including constriction of play.
5. Socially withdrawn behavior.
6. Persistent reduction in expression of positive emotions.

**D.** Alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

1. Irritable behavior and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects (including extreme temper tantrums).
2. Hypervigilance.
3. Exaggerated startle response.
4. Problems with concentration.
5. Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).

**E.** The duration of the disturbance is more than 1 month.



- F. The disturbance causes clinically significant distress or impairment in relationships with parents, siblings, peers, or other caregivers or with school behavior.
- G. The disturbance is not attributable to the physiological effects of a substance (e.g., medication or alcohol) or another medical condition.

*Specify whether:*

**With dissociative symptoms:** The individual's symptoms meet the criteria for post-traumatic stress disorder, and the individual experiences persistent or recurrent symptoms of either of the following:

1. **Depersonalization:** Persistent or recurrent experiences of feeling detached from, and as if one were an outside observer of, one's mental processes or body (e.g., feeling as though one were in a dream; feeling a sense of unreality of self or body or of time moving slowly).
2. **Derealization:** Persistent or recurrent experiences of unreality of surroundings (e.g., the world around the individual is experienced as unreal, dreamlike, distant, or distorted).

**Note:** To use this subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (e.g., blackouts) or another medical condition (e.g., complex partial seizures).

*Specify if:*

**With delayed expression:** If the full diagnostic criteria are not met until at least 6 months after the event (although the onset and expression of some symptoms may be immediate).

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## Diagnostic Features

The essential feature of posttraumatic stress disorder (PTSD) is the development of characteristic symptoms following exposure to one or more traumatic events. Emotional reactions to the traumatic event (e.g., fear, helplessness, horror) are no longer a part of Criterion A. The clinical presentation of PTSD varies. In some individuals, fear-based re-experiencing, emotional, and behavioral symptoms may predominate. In others, anhedonic or dysphoric mood states and negative cognitions may be most distressing. In some other individuals, arousal and reactive-externalizing symptoms are prominent, while in others, dissociative symptoms predominate. Finally, some individuals exhibit combinations of these symptom patterns.

The directly experienced traumatic events in Criterion A include, but are not limited to, exposure to war as a combatant or civilian, threatened or actual physical assault (e.g., physical attack, robbery, mugging, childhood physical abuse), threatened or actual sexual violence (e.g., forced sexual penetration, alcohol/drug-facilitated sexual penetration, abusive sexual contact, noncontact sexual abuse, sexual trafficking), being kidnapped, being taken hostage, terrorist attack, torture, incarceration as a prisoner of war, natural or human-made disasters, and severe motor vehicle accidents. For children, sexually violent events may include developmentally inappropriate sexual experiences without physical violence or injury. A life-threatening illness or debilitating medical condition is not necessarily considered a traumatic event. Medical incidents that qualify as traumatic events involve sudden, catastrophic events (e.g., waking during surgery, anaphylactic shock). Witnessed events include, but are not limited to, observing threatened or serious injury, unnatural death, physical or sexual abuse of another person due to violent assault, domestic violence, accident, war or disaster, or a medical catastrophe in one's child (e.g., a life-threatening hemorrhage). Indirect exposure through learning about an event is limited to experiences affecting close relatives or friends and experiences that are violent or accidental (e.g., death due to natural causes does not qualify). Such events include violent per-

sonal assault, suicide, serious accident, and serious injury. The disorder may be especially severe or long-lasting when the stressor is interpersonal and intentional (e.g., torture, sexual violence).

The traumatic event can be reexperienced in various ways. Commonly, the individual has recurrent, involuntary, and intrusive recollections of the event (Criterion B1). Intrusive recollections in PTSD are distinguished from depressive rumination in that they apply only to involuntary and intrusive distressing memories. The emphasis is on recurrent memories of the event that usually include sensory, emotional, or physiological behavioral components. A common reexperiencing symptom is distressing dreams that replay the event itself or that are representative or thematically related to the major threats involved in the traumatic event (Criterion B2). The individual may experience dissociative states that last from a few seconds to several hours or even days, during which components of the event are relived and the individual behaves as if the event were occurring at that moment (Criterion B3). Such events occur on a continuum from brief visual or other sensory intrusions about part of the traumatic event without loss of reality orientation, to complete loss of awareness of present surroundings. These episodes, often referred to as "flashbacks," are typically brief but can be associated with prolonged distress and heightened arousal. For young children, reenactment of events related to trauma may appear in play or in dissociative states. Intense psychological distress (Criterion B4) or physiological reactivity (Criterion B5) often occurs when the individual is exposed to triggering events that resemble or symbolize an aspect of the traumatic event (e.g., windy days after a hurricane; seeing someone who resembles one's perpetrator). The triggering cue could be a physical sensation (e.g., dizziness for survivors of head trauma; rapid heartbeat for a previously traumatized child), particularly for individuals with highly somatic presentations.

Stimuli associated with the trauma are persistently (e.g., always or almost always) avoided. The individual commonly makes deliberate efforts to avoid thoughts, memories, feelings, or talking about the traumatic event (e.g., utilizing distraction techniques to avoid internal reminders) (Criterion C1) and to avoid activities, objects, situations, or people who arouse recollections of it (Criterion C2).

Negative alterations in cognitions or mood associated with the event begin or worsen after exposure to the event. These negative alterations can take various forms, including an inability to remember an important aspect of the traumatic event; such amnesia is typically due to dissociative amnesia and is not due to head injury, alcohol, or drugs (Criterion D1). Another form is persistent (i.e., always or almost always) and exaggerated negative expectations regarding important aspects of life applied to oneself, others, or the future (e.g., "I have always had bad judgment"; "People in authority can't be trusted") that may manifest as a negative change in perceived identity since the trauma (e.g., "I can't trust anyone ever again"; Criterion D2). Individuals with PTSD may have persistent erroneous cognitions about the causes of the traumatic event that lead them to blame themselves or others (e.g., "It's all my fault that my uncle abused me") (Criterion D3). A persistent negative mood state (e.g., fear, horror, anger, guilt, shame) either began or worsened after exposure to the event (Criterion D4). The individual may experience markedly diminished interest or participation in previously enjoyed activities (Criterion D5), feeling detached or estranged from other people (Criterion D6), or a persistent inability to feel positive emotions (especially happiness, joy, satisfaction, or emotions associated with intimacy, tenderness, and sexuality) (Criterion D7).

Individuals with PTSD may be quick tempered and may even engage in aggressive verbal and/or physical behavior with little or no provocation (e.g., yelling at people, getting into fights, destroying objects) (Criterion E1). They may also engage in reckless or self-destructive behavior such as dangerous driving, excessive alcohol or drug use, or self-injurious or suicidal behavior (Criterion E2). PTSD is often characterized by a heightened sensitivity to potential threats, including those that are related to the traumatic experience (e.g., following a motor vehicle accident, being especially sensitive to the threat potentially

caused by cars or trucks) and those not related to the traumatic event (e.g., being fearful of suffering a heart attack) (Criterion E3). Individuals with PTSD may be very reactive to unexpected stimuli, displaying a heightened startle response, or jumpiness, to loud noises or unexpected movements (e.g., jumping markedly in response to a telephone ringing) (Criterion E4). Concentration difficulties, including difficulty remembering daily events (e.g., forgetting one's telephone number) or attending to focused tasks (e.g., following a conversation for a sustained period of time), are commonly reported (Criterion E5). Problems with sleep onset and maintenance are common and may be associated with nightmares and safety concerns or with generalized elevated arousal that interferes with adequate sleep (Criterion E6). Some individuals also experience persistent dissociative symptoms of detachment from their bodies (depersonalization) or the world around them (derealization); this is reflected in the "with dissociative symptoms" specifier.

## **Associated Features Supporting Diagnosis**

Developmental regression, such as loss of language in young children, may occur. Auditory pseudo-hallucinations, such as having the sensory experience of hearing one's thoughts spoken in one or more different voices, as well as paranoid ideation, can be present. Following prolonged, repeated, and severe traumatic events (e.g., childhood abuse, torture), the individual may additionally experience difficulties in regulating emotions or maintaining stable interpersonal relationships, or dissociative symptoms. When the traumatic event produces violent death, symptoms of both problematic bereavement and PTSD may be present.

## **Prevalence**

In the United States, projected lifetime risk for PTSD using DSM-IV criteria at age 75 years is 8.7%. Twelve-month prevalence among U.S. adults is about 3.5%. Lower estimates are seen in Europe and most Asian, African, and Latin American countries, clustering around 0.5%–1.0%. Although different groups have different levels of exposure to traumatic events, the conditional probability of developing PTSD following a similar level of exposure may also vary across cultural groups. Rates of PTSD are higher among veterans and others whose vocation increases the risk of traumatic exposure (e.g., police, firefighters, emergency medical personnel). Highest rates (ranging from one-third to more than one-half of those exposed) are found among survivors of rape, military combat and captivity, and ethnically or politically motivated internment and genocide. The prevalence of PTSD may vary across development; children and adolescents, including preschool children, generally have displayed lower prevalence following exposure to serious traumatic events; however, this may be because previous criteria were insufficiently developmentally informed. The prevalence of full-threshold PTSD also appears to be lower among older adults compared with the general population; there is evidence that subthreshold presentations are more common than full PTSD in later life and that these symptoms are associated with substantial clinical impairment. Compared with U.S. non-Latino whites, higher rates of PTSD have been reported among U.S. Latinos, African Americans, and American Indians, and lower rates have been reported among Asian Americans, after adjustment for traumatic exposure and demographic variables.

## **Development and Course**

PTSD can occur at any age, beginning after the first year of life. Symptoms usually begin within the first 3 months after the trauma, although there may be a delay of months, or even years, before criteria for the diagnosis are met. There is abundant evidence for what DSM-IV called "delayed onset" but is now called "delayed expression," with the recognition that some symptoms typically appear immediately and that the delay is in meeting full criteria.

Frequently, an individual's reaction to a trauma initially meets criteria for acute stress disorder in the immediate aftermath of the trauma. The symptoms of PTSD and the relative predominance of different symptoms may vary over time. Duration of the symptoms also varies, with complete recovery within 3 months occurring in approximately one-half of adults, while some individuals remain symptomatic for longer than 12 months and sometimes for more than 50 years. Symptom recurrence and intensification may occur in response to reminders of the original trauma, ongoing life stressors, or newly experienced traumatic events. For older individuals, declining health, worsening cognitive functioning, and social isolation may exacerbate PTSD symptoms.

The clinical expression of reexperiencing can vary across development. Young children may report new onset of frightening dreams without content specific to the traumatic event. Before age 6 years (see criteria for preschool subtype), young children are more likely to express reexperiencing symptoms through play that refers directly or symbolically to the trauma. They may not manifest fearful reactions at the time of the exposure or during reexperiencing. Parents may report a wide range of emotional or behavioral changes in young children. Children may focus on imagined interventions in their play or storytelling. In addition to avoidance, children may become preoccupied with reminders. Because of young children's limitations in expressing thoughts or labeling emotions, negative alterations in mood or cognition tend to involve primarily mood changes. Children may experience co-occurring traumas (e.g., physical abuse, witnessing domestic violence) and in chronic circumstances may not be able to identify onset of symptomatology. Avoidant behavior may be associated with restricted play or exploratory behavior in young children; reduced participation in new activities in school-age children; or reluctance to pursue developmental opportunities in adolescents (e.g., dating, driving). Older children and adolescents may judge themselves as cowardly. Adolescents may harbor beliefs of being changed in ways that make them socially undesirable and estrange them from peers (e.g., "Now I'll never fit in") and lose aspirations for the future. Irritable or aggressive behavior in children and adolescents can interfere with peer relationships and school behavior. Reckless behavior may lead to accidental injury to self or others, thrill-seeking, or high-risk behaviors. Individuals who continue to experience PTSD into older adulthood may express fewer symptoms of hyperarousal, avoidance, and negative cognitions and mood compared with younger adults with PTSD, although adults exposed to traumatic events during later life may display more avoidance, hyperarousal, sleep problems, and crying spells than do younger adults exposed to the same traumatic events. In older individuals, the disorder is associated with negative health perceptions, primary care utilization, and suicidal ideation.

## Risk and Prognostic Factors

Risk (and protective) factors are generally divided into pretraumatic, peritraumatic, and posttraumatic factors.

### Pretraumatic factors

**Temperamental.** These include childhood emotional problems by age 6 years (e.g., prior traumatic exposure, externalizing or anxiety problems) and prior mental disorders (e.g., panic disorder, depressive disorder, PTSD, or obsessive-compulsive disorder [OCD]).

**Environmental.** These include lower socioeconomic status; lower education; exposure to prior trauma (especially during childhood); childhood adversity (e.g., economic deprivation, family dysfunction, parental separation or death); cultural characteristics (e.g., fatalistic or self-blaming coping strategies); lower intelligence; minority racial/ethnic status; and a family psychiatric history. Social support prior to event exposure is protective.

**Genetic and physiological.** These include female gender and younger age at the time of trauma exposure (for adults). Certain genotypes may either be protective or increase risk of PTSD after exposure to traumatic events.

## Peritraumatic factors

**Environmental.** These include severity (dose) of the trauma (the greater the magnitude of trauma, the greater the likelihood of PTSD), perceived life threat, personal injury, interpersonal violence (particularly trauma perpetrated by a caregiver or involving a witnessed threat to a caregiver in children), and, for military personnel, being a perpetrator, witnessing atrocities, or killing the enemy. Finally, dissociation that occurs during the trauma and persists afterward is a risk factor.

## Posttraumatic factors

**Temperamental.** These include negative appraisals, inappropriate coping strategies, and development of acute stress disorder.

**Environmental.** These include subsequent exposure to repeated upsetting reminders, subsequent adverse life events, and financial or other trauma-related losses. Social support (including family stability, for children) is a protective factor that moderates outcome after trauma.

## Culture-Related Diagnostic Issues

The risk of onset and severity of PTSD may differ across cultural groups as a result of variation in the type of traumatic exposure (e.g., genocide), the impact on disorder severity of the meaning attributed to the traumatic event (e.g., inability to perform funerary rites after a mass killing), the ongoing sociocultural context (e.g., residing among unpunished perpetrators in postconflict settings), and other cultural factors (e.g., acculturative stress in immigrants). The relative risk for PTSD of particular exposures (e.g., religious persecution) may vary across cultural groups. The clinical expression of the symptoms or symptom clusters of PTSD may vary culturally, particularly with respect to avoidance and numbing symptoms, distressing dreams, and somatic symptoms (e.g., dizziness, shortness of breath, heat sensations).

Cultural syndromes and idioms of distress influence the expression of PTSD and the range of comorbid disorders in different cultures by providing behavioral and cognitive templates that link traumatic exposures to specific symptoms. For example, panic attack symptoms may be salient in PTSD among Cambodians and Latin Americans because of the association of traumatic exposure with panic-like *khyâl* attacks and *ataque de nervios*. Comprehensive evaluation of local expressions of PTSD should include assessment of cultural concepts of distress (see the chapter "Cultural Formulation" in Section III).

## Gender-Related Diagnostic Issues

PTSD is more prevalent among females than among males across the lifespan. Females in the general population experience PTSD for a longer duration than do males. At least some of the increased risk for PTSD in females appears to be attributable to a greater likelihood of exposure to traumatic events, such as rape, and other forms of interpersonal violence. Within populations exposed specifically to such stressors, gender differences in risk for PTSD are attenuated or nonsignificant.

## Suicide Risk

Traumatic events such as childhood abuse increase a person's suicide risk. PTSD is associated with suicidal ideation and suicide attempts, and presence of the disorder may indicate which individuals with ideation eventually make a suicide plan or actually attempt suicide.

## Functional Consequences of Posttraumatic Stress Disorder

PTSD is associated with high levels of social, occupational, and physical disability, as well as considerable economic costs and high levels of medical utilization. Impaired function-

ing is exhibited across social, interpersonal, developmental, educational, physical health, and occupational domains. In community and veteran samples, PTSD is associated with poor social and family relationships, absenteeism from work, lower income, and lower educational and occupational success.

## Differential Diagnosis

**Adjustment disorders.** In adjustment disorders, the stressor can be of any severity or type rather than that required by PTSD Criterion A. The diagnosis of an adjustment disorder is used when the response to a stressor that meets PTSD Criterion A does not meet all other PTSD criteria (or criteria for another mental disorder). An adjustment disorder is also diagnosed when the symptom pattern of PTSD occurs in response to a stressor that does not meet PTSD Criterion A (e.g., spouse leaving, being fired).

**Other posttraumatic disorders and conditions.** Not all psychopathology that occurs in individuals exposed to an extreme stressor should necessarily be attributed to PTSD. The diagnosis requires that trauma exposure precede the onset or exacerbation of pertinent symptoms. Moreover, if the symptom response pattern to the extreme stressor meets criteria for another mental disorder, these diagnoses should be given instead of, or in addition to, PTSD. Other diagnoses and conditions are excluded if they are better explained by PTSD (e.g., symptoms of panic disorder that occur only after exposure to traumatic reminders). If severe, symptom response patterns to the extreme stressor may warrant a separate diagnosis (e.g., dissociative amnesia).

**Acute stress disorder.** Acute stress disorder is distinguished from PTSD because the symptom pattern in acute stress disorder is restricted to a duration of 3 days to 1 month following exposure to the traumatic event.

**Anxiety disorders and obsessive-compulsive disorder.** In OCD, there are recurrent intrusive thoughts, but these meet the definition of an obsession. In addition, the intrusive thoughts are not related to an experienced traumatic event, compulsions are usually present, and other symptoms of PTSD or acute stress disorder are typically absent. Neither the arousal and dissociative symptoms of panic disorder nor the avoidance, irritability, and anxiety of generalized anxiety disorder are associated with a specific traumatic event. The symptoms of separation anxiety disorder are clearly related to separation from home or family, rather than to a traumatic event.

**Major depressive disorder.** Major depression may or may not be preceded by a traumatic event and should be diagnosed if other PTSD symptoms are absent. Specifically, major depressive disorder does not include any PTSD Criterion B or C symptoms. Nor does it include a number of symptoms from PTSD Criterion D or E.

**Personality disorders.** Interpersonal difficulties that had their onset, or were greatly exacerbated, after exposure to a traumatic event may be an indication of PTSD, rather than a personality disorder, in which such difficulties would be expected independently of any traumatic exposure.

**Dissociative disorders.** Dissociative amnesia, dissociative identity disorder, and depersonalization-derealization disorder may or may not be preceded by exposure to a traumatic event or may or may not have co-occurring PTSD symptoms. When full PTSD criteria are also met, however, the PTSD "with dissociative symptoms" subtype should be considered.

**Conversion disorder (functional neurological symptom disorder).** New onset of somatic symptoms within the context of posttraumatic distress might be an indication of PTSD rather than conversion disorder (functional neurological symptom disorder).

**Psychotic disorders.** Flashbacks in PTSD must be distinguished from illusions, hallucinations, and other perceptual disturbances that may occur in schizophrenia, brief psychotic disorder, and other psychotic disorders; depressive and bipolar disorders with

psychotic features; delirium; substance/medication-induced disorders; and psychotic disorders due to another medical condition.

**Traumatic brain injury.** When a brain injury occurs in the context of a traumatic event (e.g., traumatic accident, bomb blast, acceleration/deceleration trauma), symptoms of PTSD may appear. An event causing head trauma may also constitute a psychological traumatic event, and traumatic brain injury (TBI)-related neurocognitive symptoms are not mutually exclusive and may occur concurrently. Symptoms previously termed *postconcussive* (e.g., headaches, dizziness, sensitivity to light or sound, irritability, concentration deficits) can occur in brain-injured and non-brain-injured populations, including individuals with PTSD. Because symptoms of PTSD and TBI-related neurocognitive symptoms can overlap, a differential diagnosis between PTSD and neurocognitive disorder symptoms attributable to TBI may be possible based on the presence of symptoms that are distinctive to each presentation. Whereas reexperiencing and avoidance are characteristic of PTSD and not the effects of TBI, persistent disorientation and confusion are more specific to TBI (neurocognitive effects) than to PTSD.

## Comorbidity

Individuals with PTSD are 80% more likely than those without PTSD to have symptoms that meet diagnostic criteria for at least one other mental disorder (e.g., depressive, bipolar, anxiety, or substance use disorders). Comorbid substance use disorder and conduct disorder are more common among males than among females. Among U.S. military personnel and combat veterans who have been deployed to recent wars in Afghanistan and Iraq, co-occurrence of PTSD and mild TBI is 48%. Although most young children with PTSD also have at least one other diagnosis, the patterns of comorbidity are different than in adults, with oppositional defiant disorder and separation anxiety disorder predominating. Finally, there is considerable comorbidity between PTSD and major neurocognitive disorder and some overlapping symptoms between these disorders.

## Acute Stress Disorder

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### Diagnostic Criteria

**308.3 (F43.0)**

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- A. Exposure to actual or threatened death, serious injury, or sexual violation in one (or more) of the following ways:
1. Directly experiencing the traumatic event(s).
  2. Witnessing, in person, the event(s) as it occurred to others.
  3. Learning that the event(s) occurred to a close family member or close friend. **Note:** In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.
  4. Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains, police officers repeatedly exposed to details of child abuse).
- Note:** This does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.
- B. Presence of nine (or more) of the following symptoms from any of the five categories of intrusion, negative mood, dissociation, avoidance, and arousal, beginning or worsening after the traumatic event(s) occurred:

#### Intrusion Symptoms

1. Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s). **Note:** In children, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.

fragmentation of identity may vary with culture (e.g., possession-form presentations) and circumstance. Thus, individuals may experience discontinuities in identity and memory that may not be immediately evident to others or are obscured by attempts to hide dysfunction. Individuals with dissociative identity disorder experience a) recurrent, inexplicable intrusions into their conscious functioning and sense of self (e.g., voices; dissociated actions and speech; intrusive thoughts, emotions, and impulses), b) alterations of sense of self (e.g., attitudes, preferences, and feeling like one's body or actions are not one's own), c) odd changes of perception (e.g., depersonalization or derealization, such as feeling detached from one's body while cutting), and d) intermittent functional neurological symptoms. Stress often produces transient exacerbation of dissociative symptoms that makes them more evident.

The residual category of other specified dissociative disorder has seven examples: chronic or recurrent mixed dissociative symptoms that approach, but fall short of, the diagnostic criteria for dissociative identity disorder; dissociative states secondary to brainwashing or thought reform; two acute presentations, of less than 1 month's duration, of mixed dissociative symptoms, one of which is also marked by the presence of psychotic symptoms; and three single-symptom dissociative presentations—dissociative trance, dissociative stupor or coma, and Ganser's syndrome (the giving of approximate and vague answers).

## Dissociative Identity Disorder

### Diagnostic Criteria

**300.14 (F44.81)**

- A. Disruption of identity characterized by two or more distinct personality states, which may be described in some cultures as an experience of possession. The disruption in identity involves marked discontinuity in sense of self and sense of agency, accompanied by related alterations in affect, behavior, consciousness, memory, perception, cognition, and/or sensory-motor functioning. These signs and symptoms may be observed by others or reported by the individual.
- B. Recurrent gaps in the recall of everyday events, important personal information, and/or traumatic events that are inconsistent with ordinary forgetting.
- C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The disturbance is not a normal part of a broadly accepted cultural or religious practice.  
**Note:** In children, the symptoms are not better explained by imaginary playmates or other fantasy play.
- E. The symptoms are not attributable to the physiological effects of a substance (e.g., blackouts or chaotic behavior during alcohol intoxication) or another medical condition (e.g., complex partial seizures).

### Diagnostic Features

The defining feature of dissociative identity disorder is the presence of two or more distinct personality states or an experience of possession (Criterion A). The overtness or covertness of these personality states, however, varies as a function of psychological motivation, current level of stress, culture, internal conflicts and dynamics, and emotional resilience. Sustained periods of identity disruption may occur when psychosocial pressures are severe and/or prolonged. In many possession-form cases of dissociative identity disorder, and in a small proportion of non-possession-form cases, manifestations of alternate identities are highly overt. Most individuals with non-possession-form dissociative identity disorder do not overtly display their discontinuity of identity for long periods of time; only a small minority present to clinical attention with observable alternation of



identities. When alternate personality states are not directly observed, the disorder can be identified by two clusters of symptoms: 1) sudden alterations or discontinuities in sense of self and sense of agency (Criterion A), and 2) recurrent dissociative amnesias (Criterion B).

Criterion A symptoms are related to discontinuities of experience that can affect any aspect of an individual's functioning. Individuals with dissociative identity disorder may report the feeling that they have suddenly become depersonalized observers of their "own" speech and actions, which they may feel powerless to stop (sense of self). Such individuals may also report perceptions of voices (e.g., a child's voice; crying; the voice of a spiritual being). In some cases, voices are experienced as multiple, perplexing, independent thought streams over which the individual experiences no control. Strong emotions, impulses, and even speech or other actions may suddenly emerge, without a sense of personal ownership or control (sense of agency). These emotions and impulses are frequently reported as ego-dystonic and puzzling. Attitudes, outlooks, and personal preferences (e.g., about food, activities, dress) may suddenly shift and then shift back. Individuals may report that their bodies feel different (e.g., like a small child, like the opposite gender, huge and muscular). Alterations in sense of self and loss of personal agency may be accompanied by a feeling that these attitudes, emotions, and behaviors—even one's body—are "not mine" and/or are "not under my control." Although most Criterion A symptoms are subjective, many of these sudden discontinuities in speech, affect, and behavior can be witnessed by family, friends, or the clinician. Non-epileptic seizures and other conversion symptoms are prominent in some presentations of dissociative identity disorder, especially in some non-Western settings.

The dissociative amnesia of individuals with dissociative identity disorder manifests in three primary ways: as 1) gaps in remote memory of personal life events (e.g., periods of childhood or adolescence; some important life events, such as the death of a grandparent, getting married, giving birth); 2) lapses in dependable memory (e.g., of what happened today, of well-learned skills such as how to do their job, use a computer, read, drive); and 3) discovery of evidence of their everyday actions and tasks that they do not recollect doing (e.g., finding unexplained objects in their shopping bags or among their possessions; finding perplexing writings or drawings that they must have created; discovering injuries; "coming to" in the midst of doing something). Dissociative fugues, wherein the person discovers dissociated travel, are common. Thus, individuals with dissociative identity disorder may report that they have suddenly found themselves at the beach, at work, in a nightclub, or somewhere at home (e.g., in the closet, on a bed or sofa, in the corner) with no memory of how they came to be there. Amnesia in individuals with dissociative identity disorder is not limited to stressful or traumatic events; these individuals often cannot recall everyday events as well.

Individuals with dissociative identity disorder vary in their awareness and attitude toward their amnesias. It is common for these individuals to minimize their amnesic symptoms. Some of their amnesic behaviors may be apparent to others—as when these persons do not recall something they were witnessed to have done or said, when they cannot remember their own name, or when they do not recognize their spouse, children, or close friends.

Possession-form identities in dissociative identity disorder typically manifest as behaviors that appear as if a "spirit," supernatural being, or outside person has taken control, such that the individual begins speaking or acting in a distinctly different manner. For example, an individual's behavior may give the appearance that her identity has been replaced by the "ghost" of a girl who committed suicide in the same community years before, speaking and acting as though she were still alive. Or an individual may be "taken over" by a demon or deity, resulting in profound impairment, and demanding that the individual or a relative be punished for a past act, followed by more subtle periods of identity alteration. However, the majority of possession states around the world are normal, usually part of spiritual practice, and do not meet criteria for dissociative identity disorder.

der. The identities that arise during possession-form dissociative identity disorder present recurrently, are unwanted and involuntary, cause clinically significant distress or impairment (Criterion C), and are not a normal part of a broadly accepted cultural or religious practice (Criterion D).

## Associated Features Supporting Diagnosis

Individuals with dissociative identity disorder typically present with comorbid depression, anxiety, substance abuse, self-injury, non-epileptic seizures, or another common symptom. They often conceal, or are not fully aware of, disruptions in consciousness, amnesia, or other dissociative symptoms. Many individuals with dissociative identity disorder report dissociative flashbacks during which they undergo a sensory reliving of a previous event as though it were occurring in the present, often with a change of identity, a partial or complete loss of contact with or disorientation to current reality during the flashback, and a subsequent amnesia for the content of the flashback. Individuals with the disorder typically report multiple types of interpersonal maltreatment during childhood and adulthood. Nonmaltreatment forms of overwhelming early life events, such as multiple long, painful, early-life medical procedures, also may be reported. Self-mutilation and suicidal behavior are frequent. On standardized measures, these individuals report higher levels of hypnotizability and dissociativity compared with other clinical groups and healthy control subjects. Some individuals experience transient psychotic phenomena or episodes. Several brain regions have been implicated in the pathophysiology of dissociative identity disorder, including the orbitofrontal cortex, hippocampus, parahippocampal gyrus, and amygdala.

## Prevalence

The 12-month prevalence of dissociative identity disorder among adults in a small U.S. community study was 1.5%. The prevalence across genders in that study was 1.6% for males and 1.4% for females.

## Development and Course

Dissociative identity disorder is associated with overwhelming experiences, traumatic events, and/or abuse occurring in childhood. The full disorder may first manifest at almost any age (from earliest childhood to late life). Dissociation in children may generate problems with memory, concentration, attachment, and traumatic play. Nevertheless, children usually do not present with identity changes; instead they present primarily with overlap and interference among mental states (Criterion A phenomena), with symptoms related to discontinuities of experience. Sudden changes in identity during adolescence may appear to be just adolescent turmoil or the early stages of another mental disorder. Older individuals may present to treatment with what appear to be late-life mood disorders, obsessive-compulsive disorder, paranoia, psychotic mood disorders, or even cognitive disorders due to dissociative amnesia. In some cases, disruptive affects and memories may increasingly intrude into awareness with advancing age.

Psychological decompensation and overt changes in identity may be triggered by 1) removal from the traumatizing situation (e.g., through leaving home); 2) the individual's children reaching the same age at which the individual was originally abused or traumatized; 3) later traumatic experiences, even seemingly inconsequential ones, like a minor motor vehicle accident; or 4) the death of, or the onset of a fatal illness in, their abuser(s).

## Risk and Prognostic Factors

**Environmental.** Interpersonal physical and sexual abuse is associated with an increased risk of dissociative identity disorder. Prevalence of childhood abuse and neglect in the

United States, Canada, and Europe among those with the disorder is about 90%. Other forms of traumatizing experiences, including childhood medical and surgical procedures, war, childhood prostitution, and terrorism, have been reported.

**Course modifiers.** Ongoing abuse, later-life retraumatization, comorbidity with mental disorders, severe medical illness, and delay in appropriate treatment are associated with poorer prognosis.

## **Culture-Related Diagnostic Issues**

Many features of dissociative identity disorder can be influenced by the individual's cultural background. Individuals with this disorder may present with prominent medically unexplained neurological symptoms, such as non-epileptic seizures, paralyses, or sensory loss, in cultural settings where such symptoms are common. Similarly, in settings where normative possession is common (e.g., rural areas in the developing world, among certain religious groups in the United States and Europe), the fragmented identities may take the form of possessing spirits, deities, demons, animals, or mythical figures. Acculturation or prolonged intercultural contact may shape the characteristics of the other identities (e.g., identities in India may speak English exclusively and wear Western clothes). Possession-form dissociative identity disorder can be distinguished from culturally accepted possession states in that the former is involuntary, distressing, uncontrollable, and often recurrent or persistent; involves conflict between the individual and his or her surrounding family, social, or work milieu; and is manifested at times and in places that violate the norms of the culture or religion.

## **Gender-Related Diagnostic Issues**

Females with dissociative identity disorder predominate in adult clinical settings but not in child clinical settings. Adult males with dissociative identity disorder may deny their symptoms and trauma histories, and this can lead to elevated rates of false negative diagnosis. Females with dissociative identity disorder present more frequently with acute dissociative states (e.g., flashbacks, amnesia, fugue, functional neurological [conversion] symptoms, hallucinations, self-mutilation). Males commonly exhibit more criminal or violent behavior than females; among males, common triggers of acute dissociative states include combat, prison conditions, and physical or sexual assaults.

## **Suicide Risk**

Over 70% of outpatients with dissociative identity disorder have attempted suicide; multiple attempts are common, and other self-injurious behavior is frequent. Assessment of suicide risk may be complicated when there is amnesia for past suicidal behavior or when the presenting identity does not feel suicidal and is unaware that other dissociated identities do.

## **Functional Consequences of Dissociative Identity Disorder**

Impairment varies widely, from apparently minimal (e.g., in high-functioning professionals) to profound. Regardless of level of disability, individuals with dissociative identity disorder commonly minimize the impact of their dissociative and posttraumatic symptoms. The symptoms of higher-functioning individuals may impair their relational, marital, family, and parenting functions more than their occupational and professional life (although the latter also may be affected). With appropriate treatment, many impaired individuals show marked improvement in occupational and personal functioning. However, some remain highly impaired in most activities of living. These individuals may only respond to treatment very slowly, with gradual reduction in or improved tolerance of

their dissociative and posttraumatic symptoms. Long-term supportive treatment may slowly increase these individuals' ability to manage their symptoms and decrease use of more restrictive levels of care.

## Differential Diagnosis

**Other specified dissociative disorder.** The core of dissociative identity disorder is the division of identity, with recurrent disruption of conscious functioning and sense of self. This central feature is shared with one form of other specified dissociative disorder, which may be distinguished from dissociative identity disorder by the presence of chronic or recurrent mixed dissociative symptoms that do not meet Criterion A for dissociative identity disorder or are not accompanied by recurrent amnesia.

**Major depressive disorder.** Individuals with dissociative identity disorder are often depressed, and their symptoms may appear to meet the criteria for a major depressive episode. Rigorous assessment indicates that this depression in some cases does not meet full criteria for major depressive disorder. Other specified depressive disorder in individuals with dissociative identity disorder often has an important feature: the depressed mood and cognitions *fluctuate* because they are experienced in some identity states but not others.

**Bipolar disorders.** Individuals with dissociative identity disorder are often misdiagnosed with a bipolar disorder, most often bipolar II disorder. The relatively rapid shifts in mood in individuals with this disorder—typically within minutes or hours, in contrast to the slower mood changes typically seen in individuals with bipolar disorders—are due to the rapid, subjective shifts in mood commonly reported across dissociative states, sometimes accompanied by fluctuation in levels of activation. Furthermore, in dissociative identity disorder, elevated or depressed mood may be displayed in conjunction with overt identities, so one or the other mood may predominate for a relatively long period of time (often for days) or may shift within minutes.

**Posttraumatic stress disorder.** Some traumatized individuals have both posttraumatic stress disorder (PTSD) and dissociative identity disorder. Accordingly, it is crucial to distinguish between individuals with PTSD only and individuals who have both PTSD and dissociative identity disorder. This differential diagnosis requires that the clinician establish the presence or absence of dissociative symptoms that are not characteristic of acute stress disorder or PTSD. Some individuals with PTSD manifest dissociative symptoms that also occur in dissociative identity disorder: 1) amnesia for some aspects of trauma, 2) dissociative flashbacks (i.e., reliving of the trauma, with reduced awareness of one's current orientation), and 3) symptoms of intrusion and avoidance, negative alterations in cognition and mood, and hyperarousal that are focused around the traumatic event. On the other hand, individuals with dissociative identity disorder manifest dissociative symptoms that are not a manifestation of PTSD: 1) amnesias for many everyday (i.e., nontraumatic) events, 2) dissociative flashbacks that may be followed by amnesia for the content of the flashback, 3) disruptive intrusions (unrelated to traumatic material) by dissociated identity states into the individual's sense of self and agency, and 4) infrequent, full-blown changes among different identity states.

**Psychotic disorders.** Dissociative identity disorder may be confused with schizophrenia or other psychotic disorders. The personified, internally communicative inner voices of dissociative identity disorder, especially of a child (e.g., "I hear a little girl crying in a closet and an angry man yelling at her"), may be mistaken for psychotic hallucinations. Dissociative experiences of identity fragmentation or possession, and of perceived loss of control over thoughts, feelings, impulses, and acts, may be confused with signs of formal thought disorder, such as thought insertion or withdrawal. Individuals with dissociative identity disorder may also report visual, tactile, olfactory, gustatory, and somatic hallucinations, which are usually related to posttraumatic and dissociative factors, such as partial

flashbacks. Individuals with dissociative identity disorder experience these symptoms as caused by alternate identities, do not have delusional explanations for the phenomena, and often describe the symptoms in a personified way (e.g., “I feel like someone else wants to cry with my eyes”). Persecutory and derogatory internal voices in dissociative identity disorder associated with depressive symptoms may be misdiagnosed as major depression with psychotic features. Chaotic identity change and acute intrusions that disrupt thought processes may be distinguished from brief psychotic disorder by the predominance of dissociative symptoms and amnesia for the episode, and diagnostic evaluation after cessation of the crisis can help confirm the diagnosis.

**Substance/medication-induced disorders.** Symptoms associated with the physiological effects of a substance can be distinguished from dissociative identity disorder if the substance in question is judged to be etiologically related to the disturbance.

**Personality disorders.** Individuals with dissociative identity disorder often present identities that appear to encapsulate a variety of severe personality disorder features, suggesting a differential diagnosis of personality disorder, especially of the borderline type. Importantly, however, the individual’s longitudinal variability in personality style (due to inconsistency among identities) differs from the pervasive and persistent dysfunction in affect management and interpersonal relationships typical of those with personality disorders.

**Conversion disorder (functional neurological symptom disorder).** This disorder may be distinguished from dissociative identity disorder by the absence of an identity disruption characterized by two or more distinct personality states or an experience of possession. Dissociative amnesia in conversion disorder is more limited and circumscribed (e.g., amnesia for a non-epileptic seizure).

**Seizure disorders.** Individuals with dissociative identity disorder may present with seizurelike symptoms and behaviors that resemble complex partial seizures with temporal lobe foci. These include déjà vu, jamais vu, depersonalization, derealization, out-of-body experiences, amnesia, disruptions of consciousness, hallucinations, and other intrusion phenomena of sensation, affect, and thought. Normal electroencephalographic findings, including telemetry, differentiate non-epileptic seizures from the seizurelike symptoms of dissociative identity disorder. Also, individuals with dissociative identity disorder obtain very high dissociation scores, whereas individuals with complex partial seizures do not.

**Factitious disorder and malingering.** Individuals who feign dissociative identity disorder do not report the subtle symptoms of intrusion characteristic of the disorder; instead they tend to overreport well-publicized symptoms of the disorder, such as dissociative amnesia, while underreporting less-publicized comorbid symptoms, such as depression. Individuals who feign dissociative identity disorder tend to be relatively undisturbed by or may even seem to enjoy “having” the disorder. In contrast, individuals with genuine dissociative identity disorder tend to be ashamed of and overwhelmed by their symptoms and to underreport their symptoms or deny their condition. Sequential observation, corroborating history, and intensive psychometric and psychological assessment may be helpful in assessment.

Individuals who malingering dissociative identity disorder usually create limited, stereotyped alternate identities, with feigned amnesia, related to the events for which gain is sought. For example, they may present an “all-good” identity and an “all-bad” identity in hopes of gaining exculpation for a crime.

## Comorbidity

Many individuals with dissociative identity disorder present with a comorbid disorder. If not assessed and treated specifically for the dissociative disorder, these individuals often receive prolonged treatment for the comorbid diagnosis only, with limited overall treatment response and resultant demoralization, and disability.

Individuals with dissociative identity disorder usually exhibit a large number of comorbid disorders. In particular, most develop PTSD. Other disorders that are highly comorbid with dissociative identity disorder include depressive disorders, trauma- and stressor-related disorders, personality disorders (especially avoidant and borderline personality disorders), conversion disorder (functional neurological symptom disorder), somatic symptom disorder, eating disorders, substance-related disorders, obsessive-compulsive disorder, and sleep disorders. Dissociative alterations in identity, memory, and consciousness may affect the symptom presentation of comorbid disorders.

## Dissociative Amnesia

### Diagnostic Criteria

**300.12 (F44.0)**

- A. An inability to recall important autobiographical information, usually of a traumatic or stressful nature, that is inconsistent with ordinary forgetting.  
**Note:** Dissociative amnesia most often consists of localized or selective amnesia for a specific event or events; or generalized amnesia for identity and life history.
- B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- C. The disturbance is not attributable to the physiological effects of a substance (e.g., alcohol or other drug of abuse, a medication) or a neurological or other medical condition (e.g., partial complex seizures, transient global amnesia, sequelae of a closed head injury/traumatic brain injury, other neurological condition).
- D. The disturbance is not better explained by dissociative identity disorder, posttraumatic stress disorder, acute stress disorder, somatic symptom disorder, or major or mild neurocognitive disorder.

**Coding note:** The code for dissociative amnesia without dissociative fugue is **300.12 (F44.0)**. The code for dissociative amnesia with dissociative fugue is **300.13 (F44.1)**.

*Specify if:*

**300.13 (F44.1) With dissociative fugue:** Apparently purposeful travel or bewildered wandering that is associated with amnesia for identity or for other important autobiographical information.

### Diagnostic Features

The defining characteristic of dissociative amnesia is an inability to recall important autobiographical information that 1) should be successfully stored in memory and 2) ordinarily would be readily remembered (Criterion A). Dissociative amnesia differs from the permanent amnesias due to neurobiological damage or toxicity that prevent memory storage or retrieval in that it is always potentially reversible because the memory has been successfully stored.

*Localized amnesia*, a failure to recall events during a circumscribed period of time, is the most common form of dissociative amnesia. Localized amnesia may be broader than amnesia for a single traumatic event (e.g., months or years associated with child abuse or intense combat). In *selective amnesia*, the individual can recall some, but not all, of the events during a circumscribed period of time. Thus, the individual may remember part of a traumatic event but not other parts. Some individuals report both localized and selective amnesias.

*Generalized amnesia*, a complete loss of memory for one's life history, is rare. Individuals with generalized amnesia may forget personal identity. Some lose previous knowledge about the world (i.e., semantic knowledge) and can no longer access well-learned skills

(i.e., procedural knowledge). Generalized amnesia has an acute onset; the perplexity, disorientation, and purposeless wandering of individuals with generalized amnesia usually bring them to the attention of the police or psychiatric emergency services. Generalized amnesia may be more common among combat veterans, sexual assault victims, and individuals experiencing extreme emotional stress or conflict.

Individuals with dissociative amnesia are frequently unaware (or only partially aware) of their memory problems. Many, especially those with localized amnesia, minimize the importance of their memory loss and may become uncomfortable when prompted to address it. In *systematized amnesia*, the individual loses memory for a specific category of information (e.g., all memories relating to one's family, a particular person, or childhood sexual abuse). In *continuous amnesia*, an individual forgets each new event as it occurs.

## Associated Features Supporting Diagnosis

Many individuals with dissociative amnesia are chronically impaired in their ability to form and sustain satisfactory relationships. Histories of trauma, child abuse, and victimization are common. Some individuals with dissociative amnesia report dissociative flashbacks (i.e., behavioral reexperiencing of traumatic events). Many have a history of self-mutilation, suicide attempts, and other high-risk behaviors. Depressive and functional neurological symptoms are common, as are depersonalization, auto-hypnotic symptoms, and high hypnotizability. Sexual dysfunctions are common. Mild traumatic brain injury may precede dissociative amnesia.

## Prevalence

The 12-month prevalence for dissociative amnesia among adults in a small U.S. community study was 1.8% (1.0% for males; 2.6% for females).

## Development and Course

Onset of generalized amnesia is usually sudden. Less is known about the onset of localized and selective amnesias because these amnesias are seldom evident, even to the individual. Although overwhelming or intolerable events typically precede localized amnesia, its onset may be delayed for hours, days, or longer.

Individuals may report multiple episodes of dissociative amnesia. A single episode may predispose to future episodes. In between episodes of amnesia, the individual may or may not appear to be acutely symptomatic. The duration of the forgotten events can range from minutes to decades. Some episodes of dissociative amnesia resolve rapidly (e.g., when the person is removed from combat or some other stressful situation), whereas other episodes persist for long periods of time. Some individuals may gradually recall the dissociated memories years later. Dissociative capacities may decline with age, but not always. As the amnesia remits, there may be considerable distress, suicidal behavior, and symptoms of posttraumatic stress disorder (PTSD).

Dissociative amnesia has been observed in young children, adolescents, and adults. Children may be the most difficult to evaluate because they often have difficulty understanding questions about amnesia, and interviewers may find it difficult to formulate child-friendly questions about memory and amnesia. Observations of apparent dissociative amnesia are often difficult to differentiate from inattention, absorption, anxiety, oppositional behavior, and learning disorders. Reports from several different sources (e.g., teacher, therapist, case worker) may be needed to diagnose amnesia in children.

## Risk and Prognostic Factors

**Environmental.** Single or repeated traumatic experiences (e.g., war, childhood maltreatment, natural disaster, internment in concentration camps, genocide) are common ante-

cedents. Dissociative amnesia is more likely to occur with 1) a greater number of adverse childhood experiences, particularly physical and/or sexual abuse, 2) interpersonal violence; and 3) increased severity, frequency, and violence of the trauma.

**Genetic and physiological.** There are no genetic studies of dissociative amnesia. Studies of dissociation report significant genetic and environmental factors in both clinical and nonclinical samples.

**Course modifiers.** Removal from the traumatic circumstances underlying the dissociative amnesia (e.g., combat) may bring about a rapid return of memory. The memory loss of individuals with dissociative fugue may be particularly refractory. Onset of PTSD symptoms may decrease localized, selective, or systematized amnesia. The returning memory, however, may be experienced as flashbacks that alternate with amnesia for the content of the flashbacks.

## Culture-Related Diagnostic Issues

In Asia, the Middle East, and Latin America, non-epileptic seizures and other functional neurological symptoms may accompany dissociative amnesia. In cultures with highly restrictive social traditions, the precipitants of dissociative amnesia often do not involve frank trauma. Instead, the amnesia is preceded by severe psychological stresses or conflicts (e.g., marital conflict, other family disturbances, attachment problems, conflicts due to restriction or oppression).

## Suicide Risk

Suicidal and other self-destructive behaviors are common in individuals with dissociative amnesia. Suicidal behavior may be a particular risk when the amnesia remits suddenly and overwhelms the individual with intolerable memories.

## Functional Consequences of Dissociative Amnesia

The impairment of individuals with localized, selective, or systematized dissociative amnesia ranges from limited to severe. Individuals with chronic generalized dissociative amnesia usually have impairment in all aspects of functioning. Even when these individuals “re-learn” aspects of their life history, autobiographical memory remains very impaired. Most become vocationally and interpersonally disabled.

## Differential Diagnosis

**Dissociative identity disorder.** Individuals with dissociative amnesia may report depersonalization and auto-hypnotic symptoms. Individuals with dissociative identity disorder report pervasive discontinuities in sense of self and agency, accompanied by many other dissociative symptoms. The amnesias of individuals with localized, selective, and/or systematized dissociative amnesias are relatively stable. Amnesias in dissociative identity disorder include amnesia for everyday events, finding of unexplained possessions, sudden fluctuations in skills and knowledge, major gaps in recall of life history, and brief amnesic gaps in interpersonal interactions.

**Posttraumatic stress disorder.** Some individuals with PTSD cannot recall part or all of a specific traumatic event (e.g., a rape victim with depersonalization and/or derealization symptoms who cannot recall most events for the entire day of the rape). When that amnesia extends beyond the immediate time of the trauma, a comorbid diagnosis of dissociative amnesia is warranted.

**Neurocognitive disorders.** In neurocognitive disorders, memory loss for personal information is usually embedded in cognitive, linguistic, affective, attentional, and behavioral



disturbances. In dissociative amnesia, memory deficits are primarily for autobiographical information; intellectual and cognitive abilities are preserved.

**Substance-related disorders.** In the context of repeated intoxication with alcohol or other substances/medications, there may be episodes of “black outs” or periods for which the individual has no memory. To aid in distinguishing these episodes from dissociative amnesia, a longitudinal history noting that the amnesic episodes occur only in the context of intoxication and do not occur in other situations would help identify the source as substance-induced; however the distinction may be difficult when the individual with dissociative amnesia may also misuse alcohol or other substances in the context of stressful situations that may also exacerbate dissociative symptoms. Some individuals with comorbid dissociative amnesia and substance use disorders will attribute their memory problems solely to the substance use. Prolonged use of alcohol or other substances may result in a substance-induced neurocognitive disorder that may be associated with impaired cognitive function, but in this context the protracted history of substance use and the persistent deficits associated with the neurocognitive disorder would serve to distinguish it from dissociative amnesia, where there is typically no evidence of persistent impairment in intellectual functioning.

**Posttraumatic amnesia due to brain injury.** Amnesia may occur in the context of a traumatic brain injury (TBI) when there has been an impact to the head or other mechanisms of rapid movement or displacement of the brain within the skull TBI. Other characteristics of TBI include loss of consciousness, disorientation and confusion, or, in more severe cases, neurological signs (e.g., abnormalities on neuroimaging, a new onset of seizures or a marked worsening of a preexisting seizure disorder, visual field cuts, anosmia). A neurocognitive disorder attributable to TBI must present either immediately after brain injury occurs or immediately after the individual recovers consciousness after the injury, and persist past the acute post-injury period. The cognitive presentation of a neurocognitive disorder following TBI is variable and includes difficulties in the domains of complex attention, executive function, learning and memory as well as slowed speed of information processing and disturbances in social cognition. These additional features help distinguish it from dissociative amnesia.

**Seizure disorders.** Individuals with seizure disorders may exhibit complex behavior during seizures or post-ictally with subsequent amnesia. Some individuals with a seizure disorder engage in nonpurposive wandering that is limited to the period of seizure activity. Conversely, behavior during a dissociative fugue is usually purposeful, complex, and goal-directed and may last for days, weeks, or longer. Occasionally, individuals with a seizure disorder will report that earlier autobiographical memories have been “wiped out” as the seizure disorder progresses. Such memory loss is not associated with traumatic circumstances and appears to occur randomly. Serial electroencephalograms usually show abnormalities. Telemetric electroencephalographic monitoring usually shows an association between the episodes of amnesia and seizure activity. Dissociative and epileptic amnesias may coexist.

**Catatonic stupor.** Mutism in catatonic stupor may suggest dissociative amnesia, but failure of recall is absent. Other catatonic symptoms (e.g., rigidity, posturing, negativism) are usually present.

**Factitious disorder and malingering.** There is no test, battery of tests, or set of procedures that invariably distinguishes dissociative amnesia from feigned amnesia. Individuals with factitious disorder or malingering have been noted to continue their deception even during hypnotic or barbiturate-facilitated interviews. Feigned amnesia is more common in individuals with 1) acute, florid dissociative amnesia; 2) financial, sexual, or legal problems; or 3) a wish to escape stressful circumstances. True amnesia can be associated with those same circumstances. Many individuals who malingering confess spontaneously or when confronted.

**Normal and age-related changes in memory.** Memory decrements in major and mild neurocognitive disorders differ from those of dissociative amnesia, which are usually associated with stressful events and are more specific, extensive, and/or complex.

## Comorbidity

As dissociative amnesia begins to remit, a wide variety of affective phenomena may surface: dysphoria, grief, rage, shame, guilt, psychological conflict and turmoil, and suicidal and homicidal ideation, impulses, and acts. These individuals may have symptoms that then meet diagnostic criteria for persistent depressive disorder (dysthymia); major depressive disorder; other specified or unspecified depressive disorder; adjustment disorder, with depressed mood; or adjustment disorder, with mixed disturbance of emotions and conduct. Many individuals with dissociative amnesia develop PTSD at some point during their life, especially when the traumatic antecedents of their amnesia are brought into conscious awareness.

Many individuals with dissociative amnesia have symptoms that meet diagnostic criteria for a comorbid somatic symptom or related disorder (and vice versa), including somatic symptom disorder and conversion disorder (functional neurological symptom disorder). Many individuals with dissociative amnesia have symptoms that meet diagnostic criteria for a personality disorder, especially dependent, avoidant, and borderline.

## Depersonalization/Derealization Disorder

### Diagnostic Criteria

**300.6 (F48.1)**

- A. The presence of persistent or recurrent experiences of depersonalization, derealization, or both:
  1. **Depersonalization:** Experiences of unreality, detachment, or being an outside observer with respect to one's thoughts, feelings, sensations, body, or actions (e.g., perceptual alterations, distorted sense of time, unreal or absent self, emotional and/or physical numbing).
  2. **Derealization:** Experiences of unreality or detachment with respect to surroundings (e.g., individuals or objects are experienced as unreal, dreamlike, foggy, lifeless, or visually distorted).
- B. During the depersonalization or derealization experiences, reality testing remains intact.
- C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, medication) or another medical condition (e.g., seizures).
- E. The disturbance is not better explained by another mental disorder, such as schizophrenia, panic disorder, major depressive disorder, acute stress disorder, posttraumatic stress disorder, or another dissociative disorder.

## Diagnostic Features

The essential features of depersonalization/derealization disorder are persistent or recurrent episodes of depersonalization, derealization, or both. Episodes of depersonalization are characterized by a feeling of unreality or detachment from, or unfamiliarity with, one's whole self or from aspects of the self (Criterion A1). The individual may feel detached from his or her entire being (e.g., "I am no one," "I have no self"). He or she may also feel subjectively detached from aspects of the self, including feelings (e.g., hypoemotionality:

present, the degree of impairment is more marked than would be expected from the physical illness alone. When an individual's symptoms meet diagnostic criteria for somatic symptom disorder, the disorder should be diagnosed; however, in view of the frequent comorbidity, especially with anxiety and depressive disorders, evidence for these concurrent diagnoses should be sought.

Illness Anxiety Disorder

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Diagnostic Criteria300.7 (F45.21)

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- A. Preoccupation with having or acquiring a serious illness.
- B. Somatic symptoms are not present or, if present, are only mild in intensity. If another medical condition is present or there is a high risk for developing a medical condition (e.g., strong family history is present), the preoccupation is clearly excessive or disproportionate.
- C. There is a high level of anxiety about health, and the individual is easily alarmed about personal health status.
- D. The individual performs excessive health-related behaviors (e.g., repeatedly checks his or her body for signs of illness) or exhibits maladaptive avoidance (e.g., avoids doctor appointments and hospitals).
- E. Illness preoccupation has been present for at least 6 months, but the specific illness that is feared may change over that period of time.
- F. The illness-related preoccupation is not better explained by another mental disorder, such as somatic symptom disorder, panic disorder, generalized anxiety disorder, body dysmorphic disorder, obsessive-compulsive disorder, or delusional disorder, somatic type.

*Specify whether:*  
**Care-seeking type:** Medical care, including physician visits or undergoing tests and procedures, is frequently used.  
**Care-avoidant type:** Medical care is rarely used.

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Diagnostic Features

Most individuals with hypochondriasis are now classified as having somatic symptom disorder; however, in a minority of cases, the diagnosis of illness anxiety disorder applies instead. Illness anxiety disorder entails a preoccupation with having or acquiring a serious, undiagnosed medical illness (Criterion A). Somatic symptoms are not present or, if present, are only mild in intensity (Criterion B). A thorough evaluation fails to identify a serious medical condition that accounts for the individual's concerns. While the concern may be derived from a nonpathological physical sign or sensation, the individual's distress emanates not primarily from the physical complaint itself but rather from his or her anxiety about the meaning, significance, or cause of the complaint (i.e., the suspected medical diagnosis). If a physical sign or symptom is present, it is often a normal physiological sensation (e.g., orthostatic dizziness), a benign and self-limited dysfunction (e.g., transient tinnitus), or a bodily discomfort not generally considered indicative of disease (e.g., belching). If a diagnosable medical condition is present, the individual's anxiety and preoccupation are clearly excessive and disproportionate to the severity of the condition (Criterion B). Empirical evidence and existing literature pertain to previously defined DSM hypochondriasis, and it is unclear to what extent and how precisely they apply to the description of this new diagnosis.

The preoccupation with the idea that one is sick is accompanied by substantial anxiety about health and disease (Criterion C). Individuals with illness anxiety disorder are easily

alarmed about illness, such as by hearing about someone else falling ill or reading a health-related news story. Their concerns about undiagnosed disease do not respond to appropriate medical reassurance, negative diagnostic tests, or benign course. The physician's attempts at reassurance and symptom palliation generally do not alleviate the individual's concerns and may heighten them. Illness concerns assume a prominent place in the individual's life, affecting daily activities, and may even result in invalidism. Illness becomes a central feature of the individual's identity and self-image, a frequent topic of social discourse, and a characteristic response to stressful life events. Individuals with the disorder often examine themselves repeatedly (e.g., examining one's throat in the mirror) (Criterion D). They research their suspected disease excessively (e.g., on the Internet) and repeatedly seek reassurance from family, friends, or physicians. This incessant worrying often becomes frustrating for others and may result in considerable strain within the family. In some cases, the anxiety leads to maladaptive avoidance of situations (e.g., visiting sick family members) or activities (e.g., exercise) that these individuals fear might jeopardize their health.

## Associated Features Supporting Diagnosis

Because they believe they are medically ill, individuals with illness anxiety disorder are encountered far more frequently in medical than in mental health settings. The majority of individuals with illness anxiety disorder have extensive yet unsatisfactory medical care, though some may be too anxious to seek medical attention. They generally have elevated rates of medical utilization but do not utilize mental health services more than the general population. They often consult multiple physicians for the same problem and obtain repeatedly negative diagnostic test results. At times, medical attention leads to a paradoxical exacerbation of anxiety or to iatrogenic complications from diagnostic tests and procedures. Individuals with the disorder are generally dissatisfied with their medical care and find it unhelpful, often feeling they are not being taken seriously by physicians. At times, these concerns may be justified, since physicians sometimes are dismissive or respond with frustration or hostility. This response can occasionally result in a failure to diagnose a medical condition that is present.

## Prevalence

Prevalence estimates of illness anxiety disorder are based on estimates of the DSM-III and DSM-IV diagnosis *hypochondriasis*. The 1- to 2-year prevalence of health anxiety and/or disease conviction in community surveys and population-based samples ranges from 1.3% to 10%. In ambulatory medical populations, the 6-month/1-year prevalence rates are between 3% and 8%. The prevalence of the disorder is similar in males and females.

## Development and Course

The development and course of illness anxiety disorder are unclear. Illness anxiety disorder is generally thought to be a chronic and relapsing condition with an age at onset in early and middle adulthood. In population-based samples, health-related anxiety increases with age, but the ages of individuals with high health anxiety in medical settings do not appear to differ from those of other patients in those settings. In older individuals, health-related anxiety often focuses on memory loss; the disorder is thought to be rare in children.

## Risk and Prognostic Factors

**Environmental.** Illness anxiety disorder may sometimes be precipitated by a major life stress or a serious but ultimately benign threat to the individual's health. A history of child-

hood abuse or of a serious childhood illness may predispose to development of the disorder in adulthood.

**Course modifiers.** Approximately one-third to one-half of individuals with illness anxiety disorder have a transient form, which is associated with less psychiatric comorbidity, more medical comorbidity, and less severe illness anxiety disorder.

## Culture-Related Diagnostic Issues

The diagnosis should be made with caution in individuals whose ideas about disease are congruent with widely held, culturally sanctioned beliefs. Little is known about the phenomenology of the disorder across cultures, although the prevalence appears to be similar across different countries with diverse cultures.

## Functional Consequences of Illness Anxiety Disorder

Illness anxiety disorder causes substantial role impairment and decrements in physical function and health-related quality of life. Health concerns often interfere with interpersonal relationships, disrupt family life, and damage occupational performance.

## Differential Diagnosis

**Other medical conditions.** The first differential diagnostic consideration is an underlying medical condition, including neurological or endocrine conditions, occult malignancies, and other diseases that affect multiple body systems. The presence of a medical condition does not rule out the possibility of coexisting illness anxiety disorder. If a medical condition is present, the health-related anxiety and disease concerns are clearly disproportionate to its seriousness. Transient preoccupations related to a medical condition do not constitute illness anxiety disorder.

**Adjustment disorders.** Health-related anxiety is a normal response to serious illness and is not a mental disorder. Such nonpathological health anxiety is clearly related to the medical condition and is typically time-limited. If the health anxiety is severe enough, an adjustment disorder may be diagnosed. However, only when the health anxiety is of sufficient duration, severity, and distress can illness anxiety disorder be diagnosed. Thus, the diagnosis requires the continuous persistence of disproportionate health-related anxiety for at least 6 months.

**Somatic symptom disorder.** Somatic symptom disorder is diagnosed when significant somatic symptoms are present. In contrast, individuals with illness anxiety disorder have minimal somatic symptoms and are primarily concerned with the idea they are ill.

**Anxiety disorders.** In generalized anxiety disorder, individuals worry about multiple events, situations, or activities, only one of which may involve health. In panic disorder, the individual may be concerned that the panic attacks reflect the presence of a medical illness; however, although these individuals may have health anxiety, their anxiety is typically very acute and episodic. In illness anxiety disorder, the health anxiety and fears are more persistent and enduring. Individuals with illness anxiety disorder may experience panic attacks that are triggered by their illness concerns.

**Obsessive-compulsive and related disorders.** Individuals with illness anxiety disorder may have intrusive thoughts about having a disease and also may have associated compulsive behaviors (e.g., seeking reassurance). However, in illness anxiety disorder, the preoccupations are usually focused on having a disease, whereas in obsessive-compulsive disorder (OCD), the thoughts are intrusive and are usually focused on fears of getting a disease in the future. Most individuals with OCD have obsessions or compulsions involving other concerns in addition to fears about contracting disease. In body dysmorphic dis-

order, concerns are limited to the individual's physical appearance, which is viewed as defective or flawed.

**Major depressive disorder.** Some individuals with a major depressive episode ruminate about their health and worry excessively about illness. A separate diagnosis of illness anxiety disorder is not made if these concerns occur only during major depressive episodes. However, if excessive illness worry persists after remission of an episode of major depressive disorder, the diagnosis of illness anxiety disorder should be considered.

**Psychotic disorders.** Individuals with illness anxiety disorder are not delusional and can acknowledge the possibility that the feared disease is not present. Their ideas do not attain the rigidity and intensity seen in the somatic delusions occurring in psychotic disorders (e.g., schizophrenia; delusional disorder, somatic type; major depressive disorder, with psychotic features). True somatic delusions are generally more bizarre (e.g., that an organ is rotting or dead) than the concerns seen in illness anxiety disorder. The concerns seen in illness anxiety disorder, though not founded in reality, are plausible.

## Comorbidity

Because illness anxiety disorder is a new disorder, exact comorbidities are unknown. Hypochondriasis co-occurs with anxiety disorders (in particular, generalized anxiety disorder, panic disorder, and OCD) and depressive disorders. Approximately two-thirds of individuals with illness anxiety disorder are likely to have at least one other comorbid major mental disorder. Individuals with illness anxiety disorder may have an elevated risk for somatic symptom disorder and personality disorders.

# Conversion Disorder (Functional Neurological Symptom Disorder)

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## Diagnostic Criteria

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- A. One or more symptoms of altered voluntary motor or sensory function.
- B. Clinical findings provide evidence of incompatibility between the symptom and recognized neurological or medical conditions.
- C. The symptom or deficit is not better explained by another medical or mental disorder.
- D. The symptom or deficit causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation.

**Coding note:** The ICD-9-CM code for conversion disorder is **300.11**, which is assigned regardless of the symptom type. The ICD-10-CM code depends on the symptom type (see below).

*Specify symptom type:*

**(F44.4) With weakness or paralysis**

**(F44.4) With abnormal movement** (e.g., tremor, dystonic movement, myoclonus, gait disorder)

**(F44.4) With swallowing symptoms**

**(F44.4) With speech symptom** (e.g., dysphonia, slurred speech)

**(F44.5) With attacks or seizures**

**(F44.6) With anesthesia or sensory loss**

**(F44.6) With special sensory symptom** (e.g., visual, olfactory, or hearing disturbance)

**(F44.7) With mixed symptoms**

vidual with angina that is precipitated whenever he becomes enraged would be diagnosed as having psychological factors affecting other medical conditions, whereas an individual with angina who developed maladaptive anticipatory anxiety would be diagnosed as having an adjustment disorder with anxiety. In clinical practice, however, psychological factors and a medical condition are often mutually exacerbating (e.g., anxiety as both a precipitant and a consequence of angina), in which case the distinction is arbitrary. Other mental disorders frequently result in medical complications, most notably substance use disorders (e.g., alcohol use disorder, tobacco use disorder). If an individual has a coexisting major mental disorder that adversely affects or causes another medical condition, diagnoses of the mental disorder and the medical condition are usually sufficient. Psychological factors affecting other medical conditions is diagnosed when the psychological traits or behaviors do not meet criteria for a mental diagnosis.

**Somatic symptom disorder.** Somatic symptom disorder is characterized by a combination of distressing somatic symptoms and excessive or maladaptive thoughts, feelings, and behavior in response to these symptoms or associated health concerns. The individual may or may not have a diagnosable medical condition. In contrast, in psychological factors affecting other medical conditions, the psychological factors adversely affect a medical condition; the individual’s thoughts, feelings, and behavior are not necessarily excessive. The difference is one of emphasis, rather than a clear-cut distinction. In psychological factors affecting other medical conditions, the emphasis is on the exacerbation of the medical condition (e.g., an individual with angina that is precipitated whenever he becomes anxious). In somatic symptom disorder, the emphasis is on maladaptive thoughts, feelings, and behavior (e.g., an individual with angina who worries constantly that she will have a heart attack, takes her blood pressure multiple times per day, and restricts her activities).

**Illness anxiety disorder.** Illness anxiety disorder is characterized by high illness anxiety that is distressing and/or disruptive to daily life with minimal somatic symptoms. The focus of clinical concern is the individual’s worry about having a disease; in most cases, no serious disease is present. In psychological factors affecting other medical conditions, anxiety may be a relevant psychological factor affecting a medical condition, but the clinical concern is the adverse effects on the medical condition.

Comorbidity

By definition, the diagnosis of psychological factors affecting other medical conditions entails a relevant psychological or behavioral syndrome or trait and a comorbid medical condition.

Factitious Disorder

Diagnostic Criteria 300.19 (F68.10)

Factitious Disorder Imposed on Self

- A. Falsification of physical or psychological signs or symptoms, or induction of injury or disease, associated with identified deception.
- B. The individual presents himself or herself to others as ill, impaired, or injured.
- C. The deceptive behavior is evident even in the absence of obvious external rewards.
- D. The behavior is not better explained by another mental disorder, such as delusional disorder or another psychotic disorder.

Specify:

Single episode

Recurrent episodes (two or more events of falsification of illness and/or induction of injury)

**Factitious Disorder Imposed on Another  
(Previously Factitious Disorder by Proxy)**

- A. Falsification of physical or psychological signs or symptoms, or induction of injury or disease, in another, associated with identified deception.
- B. The individual presents another individual (victim) to others as ill, impaired, or injured.
- C. The deceptive behavior is evident even in the absence of obvious external rewards.
- D. The behavior is not better explained by another mental disorder, such as delusional disorder or another psychotic disorder.

**Note:** The perpetrator, not the victim, receives this diagnosis.

*Specify:*

**Single episode**

**Recurrent episodes** (two or more events of falsification of illness and/or induction of injury)

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**Recording Procedures**

When an individual falsifies illness in another (e.g., children, adults, pets), the diagnosis is factitious disorder imposed on another. The perpetrator, not the victim, is given the diagnosis. The victim may be given an abuse diagnosis (e.g., 995.54 [T74.12X]; see the chapter "Other Conditions That May Be a Focus of Clinical Attention").

**Diagnostic Features**

The essential feature of factitious disorder is the falsification of medical or psychological signs and symptoms in oneself or others that are associated with the identified deception. Individuals with factitious disorder can also seek treatment for themselves or another following induction of injury or disease. The diagnosis requires demonstrating that the individual is taking surreptitious actions to misrepresent, simulate, or cause signs or symptoms of illness or injury in the absence of obvious external rewards. Methods of illness falsification can include exaggeration, fabrication, simulation, and induction. While a preexisting medical condition may be present, the deceptive behavior or induction of injury associated with deception causes others to view such individuals (or another) as more ill or impaired, and this can lead to excessive clinical intervention. Individuals with factitious disorder might, for example, report feelings of depression and suicidality following the death of a spouse despite the death not being true or the individual's not having a spouse; deceptively report episodes of neurological symptoms (e.g., seizures, dizziness, or blacking out); manipulate a laboratory test (e.g., by adding blood to urine) to falsely indicate an abnormality; falsify medical records to indicate an illness; ingest a substance (e.g., insulin or warfarin) to induce an abnormal laboratory result or illness; or physically injure themselves or induce illness in themselves or another (e.g., by injecting fecal material to produce an abscess or to induce sepsis).

**Associated Features Supporting Diagnosis**

Individuals with factitious disorder imposed on self or factitious disorder imposed on another are at risk for experiencing great psychological distress or functional impairment by causing harm to themselves and others. Family, friends, and health care professionals are also often adversely affected by their behavior. Factitious disorders have similarities to substance use disorders, eating disorders, impulse-control disorders, pedophilic disorder, and some other established disorders related to both the persistence of the behavior and the intentional efforts to conceal the disordered behavior through deception. Whereas some aspects of factitious disorders might represent criminal behavior (e.g., factitious dis-



order imposed on another, in which the parent's actions represent abuse and maltreatment of a child), such criminal behavior and mental illness are not mutually exclusive. The diagnosis of factitious disorder emphasizes the objective identification of falsification of signs and symptoms of illness, rather than an inference about intent or possible underlying motivation. Moreover, such behaviors, including the induction of injury or disease, are associated with deception.

## Prevalence

The prevalence of factitious disorder is unknown, likely because of the role of deception in this population. Among patients in hospital settings, it is estimated that about 1% of individuals have presentations that meet the criteria for factitious disorder.

## Development and Course

The course of factitious disorder is usually one of intermittent episodes. Single episodes and episodes that are characterized as persistent and unremitting are both less common. Onset is usually in early adulthood, often after hospitalization for a medical condition or a mental disorder. When imposed on another, the disorder may begin after hospitalization of the individual's child or other dependent. In individuals with recurrent episodes of falsification of signs and symptoms of illness and/or induction of injury, this pattern of successive deceptive contact with medical personnel, including hospitalizations, may become lifelong.

## Differential Diagnosis

Caregivers who lie about abuse injuries in dependents solely to protect themselves from liability are not diagnosed with factitious disorder imposed on another because protection from liability is an external reward (Criterion C, the deceptive behavior is evident even in the absence of obvious external rewards). Such caregivers who, upon observation, analysis of medical records, and/or interviews with others, are found to lie more extensively than needed for immediate self-protection are diagnosed with factitious disorder imposed on another.

**Somatic symptom disorder.** In somatic symptom disorder, there may be excessive attention and treatment seeking for perceived medical concerns, but there is no evidence that the individual is providing false information or behaving deceptively.

**Malingering.** Malingering is differentiated from factitious disorder by the intentional reporting of symptoms for personal gain (e.g., money, time off work). In contrast, the diagnosis of factitious disorder requires the absence of obvious rewards.

**Conversion disorder (functional neurological symptom disorder).** Conversion disorder is characterized by neurological symptoms that are inconsistent with neurological pathophysiology. Factitious disorder with neurological symptoms is distinguished from conversion disorder by evidence of deceptive falsification of symptoms.

**Borderline personality disorder.** Deliberate physical self-harm in the absence of suicidal intent can also occur in association with other mental disorders such as borderline personality disorder. Factitious disorder requires that the induction of injury occur in association with deception.

**Medical condition or mental disorder not associated with intentional symptom falsification.** Presentation of signs and symptoms of illness that do not conform to an identifiable medical condition or mental disorder increases the likelihood of the presence of a factitious disorder. However, the diagnosis of factitious disorder does not exclude the presence of true medical condition or mental disorder, as comorbid illness often occurs in the individual along with factitious disorder. For example, individuals who might manipulate blood sugar levels to produce symptoms may also have diabetes.

be best made in the context of a clinical relationship over time. In some individuals, avoidant/restrictive food intake disorder might precede the onset of anorexia nervosa.

**Obsessive-compulsive disorder.** Individuals with obsessive-compulsive disorder may present with avoidance or restriction of intake in relation to preoccupations with food or ritualized eating behavior. Avoidant/restrictive food intake disorder should be diagnosed concurrently only if all criteria are met for both disorders and when the aberrant eating is a major aspect of the clinical presentation requiring specific intervention.

**Major depressive disorder.** In major depressive disorder, appetite might be affected to such an extent that individuals present with significantly restricted food intake, usually in relation to overall energy intake and often associated with weight loss. Usually appetite loss and related reduction of intake abate with resolution of mood problems. Avoidant/restrictive food intake disorder should only be used concurrently if full criteria are met for both disorders and when the eating disturbance requires specific treatment.

**Schizophrenia spectrum disorders.** Individuals with schizophrenia, delusional disorder, or other psychotic disorders may exhibit odd eating behaviors, avoidance of specific foods because of delusional beliefs, or other manifestations of avoidant or restrictive intake. In some cases, delusional beliefs may contribute to a concern about negative consequences of ingesting certain foods. Avoidant/restrictive food intake disorder should be used concurrently only if all criteria are met for both disorders and when the eating disturbance requires specific treatment.

**Factitious disorder or factitious disorder imposed on another.** Avoidant/restrictive food intake disorder should be differentiated from factitious disorder or factitious disorder imposed on another. In order to assume the sick role, some individuals with factitious disorder may intentionally describe diets that are much more restrictive than those they are actually able to consume, as well as complications of such behavior, such as a need for enteral feedings or nutritional supplements, an inability to tolerate a normal range of foods, and/or an inability to participate normally in age-appropriate situations involving food. The presentation may be impressively dramatic and engaging, and the symptoms reported inconsistently. In factitious disorder imposed on another, the caregiver describes symptoms consistent with avoidant/restrictive food intake disorder and may induce physical symptoms such as failure to gain weight. As with any diagnosis of factitious disorder imposed on another, the caregiver receives the diagnosis rather than the affected individual, and diagnosis should be made only on the basis of a careful, comprehensive assessment of the affected individual, the caregiver, and their interaction.

## Comorbidity

The most commonly observed disorders comorbid with avoidant/restrictive food intake disorder are anxiety disorders, obsessive-compulsive disorder, and neurodevelopmental disorders (specifically autism spectrum disorder, attention-deficit/hyperactivity disorder, and intellectual disability [intellectual developmental disorder]).

## Anorexia Nervosa

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### Diagnostic Criteria

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- A. Restriction of energy intake relative to requirements, leading to a significantly low body weight in the context of age, sex, developmental trajectory, and physical health. *Significantly low weight* is defined as a weight that is less than minimally normal or, for children and adolescents, less than that minimally expected.
- B. Intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain, even though at a significantly low weight.

**C.** Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight.

**Coding note:** The ICD-9-CM code for anorexia nervosa is **307.1**, which is assigned regardless of the subtype. The ICD-10-CM code depends on the subtype (see below).

*Specify whether:*

**(F50.01) Restricting type:** During the last 3 months, the individual has not engaged in recurrent episodes of binge eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas). This subtype describes presentations in which weight loss is accomplished primarily through dieting, fasting, and/or excessive exercise.

**(F50.02) Binge-eating/purging type:** During the last 3 months, the individual has engaged in recurrent episodes of binge eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas).

*Specify if:*

**In partial remission:** After full criteria for anorexia nervosa were previously met, Criterion A (low body weight) has not been met for a sustained period, but either Criterion B (intense fear of gaining weight or becoming fat or behavior that interferes with weight gain) or Criterion C (disturbances in self-perception of weight and shape) is still met.

**In full remission:** After full criteria for anorexia nervosa were previously met, none of the criteria have been met for a sustained period of time.

*Specify current severity:*

The minimum level of severity is based, for adults, on current body mass index (BMI) (see below) or, for children and adolescents, on BMI percentile. The ranges below are derived from World Health Organization categories for thinness in adults; for children and adolescents, corresponding BMI percentiles should be used. The level of severity may be increased to reflect clinical symptoms, the degree of functional disability, and the need for supervision.

**Mild:** BMI  $\geq 17$  kg/m<sup>2</sup>

**Moderate:** BMI 16–16.99 kg/m<sup>2</sup>

**Severe:** BMI 15–15.99 kg/m<sup>2</sup>

**Extreme:** BMI < 15 kg/m<sup>2</sup>

## Subtypes

Most individuals with the binge-eating/purging type of anorexia nervosa who binge eat also purge through self-induced vomiting or the misuse of laxatives, diuretics, or enemas. Some individuals with this subtype of anorexia nervosa do not binge eat but do regularly purge after the consumption of small amounts of food.

Crossover between the subtypes over the course of the disorder is not uncommon; therefore, subtype description should be used to describe current symptoms rather than longitudinal course.

## Diagnostic Features

There are three essential features of anorexia nervosa: persistent energy intake restriction; intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain; and a disturbance in self-perceived weight or shape. The individual maintains a body weight that is below a minimally normal level for age, sex, developmental trajectory, and physical health (Criterion A). Individuals' body weights frequently meet this criterion following a significant weight loss, but among children and adolescents, there may alternatively be failure to make expected weight gain or to maintain a normal developmental trajectory (i.e., while growing in height) instead of weight loss.

Criterion A requires that the individual's weight be significantly low (i.e., less than minimally normal or, for children and adolescents, less than that minimally expected). Weight assessment can be challenging because normal weight range differs among individuals, and different thresholds have been published defining thinness or underweight status. Body mass index (BMI; calculated as weight in kilograms/height in meters<sup>2</sup>) is a useful measure to assess body weight for height. For adults, a BMI of 18.5 kg/m<sup>2</sup> has been employed by the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) as the lower limit of normal body weight. Therefore, most adults with a BMI greater than or equal to 18.5 kg/m<sup>2</sup> would not be considered to have a significantly low body weight. On the other hand, a BMI of lower than 17.0 kg/m<sup>2</sup> has been considered by the WHO to indicate moderate or severe thinness; therefore, an individual with a BMI less than 17.0 kg/m<sup>2</sup> would likely be considered to have a significantly low weight. An adult with a BMI between 17.0 and 18.5 kg/m<sup>2</sup>, or even above 18.5 kg/m<sup>2</sup>, might be considered to have a significantly low weight if clinical history or other physiological information supports this judgment.

For children and adolescents, determining a BMI-for-age percentile is useful (see, e.g., the CDC BMI percentile calculator for children and teenagers. As for adults, it is not possible to provide definitive standards for judging whether a child's or an adolescent's weight is significantly low, and variations in developmental trajectories among youth limit the utility of simple numerical guidelines. The CDC has used a BMI-for-age below the 5th percentile as suggesting underweight; however, children and adolescents with a BMI above this benchmark may be judged to be significantly underweight in light of failure to maintain their expected growth trajectory. In summary, in determining whether Criterion A is met, the clinician should consider available numerical guidelines, as well as the individual's body build, weight history, and any physiological disturbances.

Individuals with this disorder typically display an intense fear of gaining weight or of becoming fat (Criterion B). This intense fear of becoming fat is usually not alleviated by weight loss. In fact, concern about weight gain may increase even as weight falls. Younger individuals with anorexia nervosa, as well as some adults, may not recognize or acknowledge a fear of weight gain. In the absence of another explanation for the significantly low weight, clinician inference drawn from collateral history, observational data, physical and laboratory findings, or longitudinal course either indicating a fear of weight gain or supporting persistent behaviors that prevent it may be used to establish Criterion B.

The experience and significance of body weight and shape are distorted in these individuals (Criterion C). Some individuals feel globally overweight. Others realize that they are thin but are still concerned that certain body parts, particularly the abdomen, buttocks, and thighs, are "too fat." They may employ a variety of techniques to evaluate their body size or weight, including frequent weighing, obsessive measuring of body parts, and persistent use of a mirror to check for perceived areas of "fat." The self-esteem of individuals with anorexia nervosa is highly dependent on their perceptions of body shape and weight. Weight loss is often viewed as an impressive achievement and a sign of extraordinary self-discipline, whereas weight gain is perceived as an unacceptable failure of self-control. Although some individuals with this disorder may acknowledge being thin, they often do not recognize the serious medical implications of their malnourished state.

Often, the individual is brought to professional attention by family members after marked weight loss (or failure to make expected weight gains) has occurred. If individuals seek help on their own, it is usually because of distress over the somatic and psychological sequelae of starvation. It is rare for an individual with anorexia nervosa to complain of weight loss *per se*. In fact, individuals with anorexia nervosa frequently either lack insight into or deny the problem. It is therefore often important to obtain information from family members or other sources to evaluate the history of weight loss and other features of the illness.

## Associated Features Supporting Diagnosis

The semi-starvation of anorexia nervosa, and the purging behaviors sometimes associated with it, can result in significant and potentially life-threatening medical conditions. The nutritional compromise associated with this disorder affects most major organ systems and can produce a variety of disturbances. Physiological disturbances, including amenorrhea and vital sign abnormalities, are common. While most of the physiological disturbances associated with malnutrition are reversible with nutritional rehabilitation, some, including loss of bone mineral density, are often not completely reversible. Behaviors such as self-induced vomiting and misuse of laxatives, diuretics, and enemas may cause a number of disturbances that lead to abnormal laboratory findings; however, some individuals with anorexia nervosa exhibit no laboratory abnormalities.

When seriously underweight, many individuals with anorexia nervosa have depressive signs and symptoms such as depressed mood, social withdrawal, irritability, insomnia, and diminished interest in sex. Because these features are also observed in individuals without anorexia nervosa who are significantly undernourished, many of the depressive features may be secondary to the physiological sequelae of semi-starvation, although they may also be sufficiently severe to warrant an additional diagnosis of major depressive disorder.

Obsessive-compulsive features, both related and unrelated to food, are often prominent. Most individuals with anorexia nervosa are preoccupied with thoughts of food. Some collect recipes or hoard food. Observations of behaviors associated with other forms of starvation suggest that obsessions and compulsions related to food may be exacerbated by undernutrition. When individuals with anorexia nervosa exhibit obsessions and compulsions that are not related to food, body shape, or weight, an additional diagnosis of obsessive-compulsive disorder (OCD) may be warranted.

Other features sometimes associated with anorexia nervosa include concerns about eating in public, feelings of ineffectiveness, a strong desire to control one's environment, inflexible thinking, limited social spontaneity, and overly restrained emotional expression. Compared with individuals with anorexia nervosa, restricting type, those with binge-eating/purging type have higher rates of impulsivity and are more likely to abuse alcohol and other drugs.

A subgroup of individuals with anorexia nervosa show excessive levels of physical activity. Increases in physical activity often precede onset of the disorder, and over the course of the disorder increased activity accelerates weight loss. During treatment, excessive activity may be difficult to control, thereby jeopardizing weight recovery.

Individuals with anorexia nervosa may misuse medications, such as by manipulating dosage, in order to achieve weight loss or avoid weight gain. Individuals with diabetes mellitus may omit or reduce insulin doses in order to minimize carbohydrate metabolism.

## Prevalence

The 12-month prevalence of anorexia nervosa among young females is approximately 0.4%. Less is known about prevalence among males, but anorexia nervosa is far less common in males than in females, with clinical populations generally reflecting approximately a 10:1 female-to-male ratio.

## Development and Course

Anorexia nervosa commonly begins during adolescence or young adulthood. It rarely begins before puberty or after age 40, but cases of both early and late onset have been described. The onset of this disorder is often associated with a stressful life event, such as leaving home for college. The course and outcome of anorexia nervosa are highly variable. Younger individuals may manifest atypical features, including denying "fear of fat." Older

individuals more likely have a longer duration of illness, and their clinical presentation may include more signs and symptoms of long-standing disorder. Clinicians should not exclude anorexia nervosa from the differential diagnosis solely on the basis of older age.

Many individuals have a period of changed eating behavior prior to full criteria for the disorder being met. Some individuals with anorexia nervosa recover fully after a single episode, with some exhibiting a fluctuating pattern of weight gain followed by relapse, and others experiencing a chronic course over many years. Hospitalization may be required to restore weight and to address medical complications. Most individuals with anorexia nervosa experience remission within 5 years of presentation. Among individuals admitted to hospitals, overall remission rates may be lower. The crude mortality rate (CMR) for anorexia nervosa is approximately 5% per decade. Death most commonly results from medical complications associated with the disorder itself or from suicide.

## Risk and Prognostic Factors

**Temperamental.** Individuals who develop anxiety disorders or display obsessional traits in childhood are at increased risk of developing anorexia nervosa.

**Environmental.** Historical and cross-cultural variability in the prevalence of anorexia nervosa supports its association with cultures and settings in which thinness is valued. Occupations and avocations that encourage thinness, such as modeling and elite athletics, are also associated with increased risk.

**Genetic and physiological.** There is an increased risk of anorexia nervosa and bulimia nervosa among first-degree biological relatives of individuals with the disorder. An increased risk of bipolar and depressive disorders has also been found among first-degree relatives of individuals with anorexia nervosa, particularly relatives of individuals with the binge-eating/purging type. Concordance rates for anorexia nervosa in monozygotic twins are significantly higher than those for dizygotic twins. A range of brain abnormalities has been described in anorexia nervosa using functional imaging technologies (functional magnetic resonance imaging, positron emission tomography). The degree to which these findings reflect changes associated with malnutrition versus primary abnormalities associated with the disorder is unclear.

## Culture-Related Diagnostic Issues

Anorexia nervosa occurs across culturally and socially diverse populations, although available evidence suggests cross-cultural variation in its occurrence and presentation. Anorexia nervosa is probably most prevalent in post-industrialized, high-income countries such as in the United States, many European countries, Australia, New Zealand, and Japan, but its incidence in most low- and middle-income countries is uncertain. Whereas the prevalence of anorexia nervosa appears comparatively low among Latinos, African Americans, and Asians in the United States, clinicians should be aware that mental health service utilization among individuals with an eating disorder is significantly lower in these ethnic groups and that the low rates may reflect an ascertainment bias. The presentation of weight concerns among individuals with eating and feeding disorders varies substantially across cultural contexts. The absence of an expressed intense fear of weight gain, sometimes referred to as "fat phobia," appears to be relatively more common in populations in Asia, where the rationale for dietary restriction is commonly related to a more culturally sanctioned complaint such as gastrointestinal discomfort. Within the United States, presentations without a stated intense fear of weight gain may be comparatively more common among Latino groups.

## Diagnostic Markers

The following laboratory abnormalities may be observed in anorexia nervosa; their presence may serve to increase diagnostic confidence.

**Hematology.** Leukopenia is common, with the loss of all cell types but usually with apparent lymphocytosis. Mild anemia can occur, as well as thrombocytopenia and, rarely, bleeding problems.

**Serum chemistry.** Dehydration may be reflected by an elevated blood urea nitrogen level. Hypercholesterolemia is common. Hepatic enzyme levels may be elevated. Hypomagnesemia, hypozincemia, hypophosphatemia, and hyperamylasemia are occasionally observed. Self-induced vomiting may lead to metabolic alkalosis (elevated serum bicarbonate), hypochloremia, and hypokalemia; laxative abuse may cause a mild metabolic acidosis.

**Endocrine.** Serum thyroxine ( $T_4$ ) levels are usually in the low-normal range; triiodothyronine ( $T_3$ ) levels are decreased, while reverse  $T_3$  levels are elevated. Females have low serum estrogen levels, whereas males have low levels of serum testosterone.

**Electrocardiography.** Sinus bradycardia is common, and, rarely, arrhythmias are noted. Significant prolongation of the QTc interval is observed in some individuals.

**Bone mass.** Low bone mineral density, with specific areas of osteopenia or osteoporosis, is often seen. The risk of fracture is significantly elevated.

**Electroencephalography.** Diffuse abnormalities, reflecting a metabolic encephalopathy, may result from significant fluid and electrolyte disturbances.

**Resting energy expenditure.** There is often a significant reduction in resting energy expenditure.

**Physical signs and symptoms.** Many of the physical signs and symptoms of anorexia nervosa are attributable to starvation. Amenorrhea is commonly present and appears to be an indicator of physiological dysfunction. If present, amenorrhea is usually a consequence of the weight loss, but in a minority of individuals it may actually precede the weight loss. In prepubertal females, menarche may be delayed. In addition to amenorrhea, there may be complaints of constipation, abdominal pain, cold intolerance, lethargy, and excess energy.

The most remarkable finding on physical examination is emaciation. Commonly, there is also significant hypotension, hypothermia, and bradycardia. Some individuals develop lanugo, a fine downy body hair. Some develop peripheral edema, especially during weight restoration or upon cessation of laxative and diuretic abuse. Rarely, petechiae or ecchymoses, usually on the extremities, may indicate a bleeding diathesis. Some individuals evidence a yellowing of the skin associated with hypercarotenemia. As may be seen in individuals with bulimia nervosa, individuals with anorexia nervosa who self-induce vomiting may have hypertrophy of the salivary glands, particularly the parotid glands, as well as dental enamel erosion. Some individuals may have scars or calluses on the dorsal surface of the hand from repeated contact with the teeth while inducing vomiting.

## Suicide Risk

Suicide risk is elevated in anorexia nervosa, with rates reported as 12 per 100,000 per year. Comprehensive evaluation of individuals with anorexia nervosa should include assessment of suicide-related ideation and behaviors as well as other risk factors for suicide, including a history of suicide attempt(s).

## Functional Consequences of Anorexia Nervosa

Individuals with anorexia nervosa may exhibit a range of functional limitations associated with the disorder. While some individuals remain active in social and professional functioning, others demonstrate significant social isolation and/or failure to fulfill academic or career potential.

## Differential Diagnosis

Other possible causes of either significantly low body weight or significant weight loss should be considered in the differential diagnosis of anorexia nervosa, especially when the presenting features are atypical (e.g., onset after age 40 years).

**Medical conditions (e.g., gastrointestinal disease, hyperthyroidism, occult malignancies, and acquired immunodeficiency syndrome [AIDS]).** Serious weight loss may occur in medical conditions, but individuals with these disorders usually do not also manifest a disturbance in the way their body weight or shape is experienced or an intense fear of weight gain or persist in behaviors that interfere with appropriate weight gain. Acute weight loss associated with a medical condition can occasionally be followed by the onset or recurrence of anorexia nervosa, which can initially be masked by the comorbid medical condition. Rarely, anorexia nervosa develops after bariatric surgery for obesity.

**Major depressive disorder.** In major depressive disorder, severe weight loss may occur, but most individuals with major depressive disorder do not have either a desire for excessive weight loss or an intense fear of gaining weight.

**Schizophrenia.** Individuals with schizophrenia may exhibit odd eating behavior and occasionally experience significant weight loss, but they rarely show the fear of gaining weight and the body image disturbance required for a diagnosis of anorexia nervosa.

**Substance use disorders.** Individuals with substance use disorders may experience low weight due to poor nutritional intake but generally do not fear gaining weight and do not manifest body image disturbance. Individuals who abuse substances that reduce appetite (e.g., cocaine, stimulants) and who also endorse fear of weight gain should be carefully evaluated for the possibility of comorbid anorexia nervosa, given that the substance use may represent a persistent behavior that interferes with weight gain (Criterion B).

**Social anxiety disorder (social phobia), obsessive-compulsive disorder, and body dysmorphic disorder.** Some of the features of anorexia nervosa overlap with the criteria for social phobia, OCD, and body dysmorphic disorder. Specifically, individuals may feel humiliated or embarrassed to be seen eating in public, as in social phobia; may exhibit obsessions and compulsions related to food, as in OCD; or may be preoccupied with an imagined defect in bodily appearance, as in body dysmorphic disorder. If the individual with anorexia nervosa has social fears that are limited to eating behavior alone, the diagnosis of social phobia should not be made, but social fears unrelated to eating behavior (e.g., excessive fear of speaking in public) may warrant an additional diagnosis of social phobia. Similarly, an additional diagnosis of OCD should be considered only if the individual exhibits obsessions and compulsions unrelated to food (e.g., an excessive fear of contamination), and an additional diagnosis of body dysmorphic disorder should be considered only if the distortion is unrelated to body shape and size (e.g., preoccupation that one's nose is too big).

**Bulimia nervosa.** Individuals with bulimia nervosa exhibit recurrent episodes of binge eating, engage in inappropriate behavior to avoid weight gain (e.g., self-induced vomiting), and are overly concerned with body shape and weight. However, unlike individuals with anorexia nervosa, binge-eating/purging type, individuals with bulimia nervosa maintain body weight at or above a minimally normal level.

**Avoidant/restrictive food intake disorder.** Individuals with this disorder may exhibit significant weight loss or significant nutritional deficiency, but they do not have a fear of gaining weight or of becoming fat, nor do they have a disturbance in the way they experience their body shape and weight.

## Comorbidity

Bipolar, depressive, and anxiety disorders commonly co-occur with anorexia nervosa. Many individuals with anorexia nervosa report the presence of either an anxiety disorder



or symptoms prior to onset of their eating disorder. OCD is described in some individuals with anorexia nervosa, especially those with the restricting type. Alcohol use disorder and other substance use disorders may also be comorbid with anorexia nervosa, especially among those with the binge-eating/purging type.

**Bulimia Nervosa**

**Diagnostic Criteria** **307.51 (F50.2)**

- A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:
  - 1. Eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than what most individuals would eat in a similar period of time under similar circumstances.
  - 2. A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).
- B. Recurrent inappropriate compensatory behaviors in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, or other medications; fasting; or excessive exercise.
- C. The binge eating and inappropriate compensatory behaviors both occur, on average, at least once a week for 3 months.
- D. Self-evaluation is unduly influenced by body shape and weight.
- E. The disturbance does not occur exclusively during episodes of anorexia nervosa.

Specify if:

- In partial remission:** After full criteria for bulimia nervosa were previously met, some, but not all, of the criteria have been met for a sustained period of time.
- In full remission:** After full criteria for bulimia nervosa were previously met, none of the criteria have been met for a sustained period of time.

Specify current severity:

The minimum level of severity is based on the frequency of inappropriate compensatory behaviors (see below). The level of severity may be increased to reflect other symptoms and the degree of functional disability.

- Mild:** An average of 1–3 episodes of inappropriate compensatory behaviors per week.
- Moderate:** An average of 4–7 episodes of inappropriate compensatory behaviors per week.
- Severe:** An average of 8–13 episodes of inappropriate compensatory behaviors per week.
- Extreme:** An average of 14 or more episodes of inappropriate compensatory behaviors per week.

**Diagnostic Features**

There are three essential features of bulimia nervosa: recurrent episodes of binge eating (Criterion A), recurrent inappropriate compensatory behaviors to prevent weight gain (Criterion B), and self-evaluation that is unduly influenced by body shape and weight (Criterion D). To qualify for the diagnosis, the binge eating and inappropriate compensatory behaviors must occur, on average, at least once per week for 3 months (Criterion C).

An “episode of binge eating” is defined as eating, in a discrete period of time, an amount of food that is definitely larger than most individuals would eat in a similar period of time under similar circumstances (Criterion A1). The context in which the eating occurs

may affect the clinician's estimation of whether the intake is excessive. For example, a quantity of food that might be regarded as excessive for a typical meal might be considered normal during a celebration or holiday meal. A "discrete period of time" refers to a limited period, usually less than 2 hours. A single episode of binge eating need not be restricted to one setting. For example, an individual may begin a binge in a restaurant and then continue to eat on returning home. Continual snacking on small amounts of food throughout the day would not be considered an eating binge.

An occurrence of excessive food consumption must be accompanied by a sense of lack of control (Criterion A2) to be considered an episode of binge eating. An indicator of loss of control is the inability to refrain from eating or to stop eating once started. Some individuals describe a dissociative quality during, or following, the binge-eating episodes. The impairment in control associated with binge eating may not be absolute; for example, an individual may continue binge eating while the telephone is ringing but will cease if a roommate or spouse unexpectedly enters the room. Some individuals report that their binge-eating episodes are no longer characterized by an acute feeling of loss of control but rather by a more generalized pattern of uncontrolled eating. If individuals report that they have abandoned efforts to control their eating, loss of control should be considered as present. Binge eating can also be planned in some instances.

The type of food consumed during binges varies both across individuals and for a given individual. Binge eating appears to be characterized more by an abnormality in the amount of food consumed than by a craving for a specific nutrient. However, during binges, individuals tend to eat foods they would otherwise avoid.

Individuals with bulimia nervosa are typically ashamed of their eating problems and attempt to conceal their symptoms. Binge eating usually occurs in secrecy or as inconspicuously as possible. The binge eating often continues until the individual is uncomfortably, or even painfully, full. The most common antecedent of binge eating is negative affect. Other triggers include interpersonal stressors; dietary restraint; negative feelings related to body weight, body shape, and food; and boredom. Binge eating may minimize or mitigate factors that precipitated the episode in the short-term, but negative self-evaluation and dysphoria often are the delayed consequences.

Another essential feature of bulimia nervosa is the recurrent use of inappropriate compensatory behaviors to prevent weight gain, collectively referred to as *purge behaviors* or *purging* (Criterion B). Many individuals with bulimia nervosa employ several methods to compensate for binge eating. Vomiting is the most common inappropriate compensatory behavior. The immediate effects of vomiting include relief from physical discomfort and reduction of fear of gaining weight. In some cases, vomiting becomes a goal in itself, and the individual will binge eat in order to vomit or will vomit after eating a small amount of food. Individuals with bulimia nervosa may use a variety of methods to induce vomiting, including the use of fingers or instruments to stimulate the gag reflex. Individuals generally become adept at inducing vomiting and are eventually able to vomit at will. Rarely, individuals consume syrup of ipecac to induce vomiting. Other purging behaviors include the misuse of laxatives and diuretics. A number of other compensatory methods may also be used in rare cases. Individuals with bulimia nervosa may misuse enemas following episodes of binge eating, but this is seldom the sole compensatory method employed. Individuals with this disorder may take thyroid hormone in an attempt to avoid weight gain. Individuals with diabetes mellitus and bulimia nervosa may omit or reduce insulin doses in order to reduce the metabolism of food consumed during eating binges. Individuals with bulimia nervosa may fast for a day or more or exercise excessively in an attempt to prevent weight gain. Exercise may be considered excessive when it significantly interferes with important activities, when it occurs at inappropriate times or in inappropriate settings, or when the individual continues to exercise despite injury or other medical complications.

Individuals with bulimia nervosa place an excessive emphasis on body shape or weight in their self-evaluation, and these factors are typically extremely important in determining

self-esteem (Criterion D). Individuals with this disorder may closely resemble those with anorexia nervosa in their fear of gaining weight, in their desire to lose weight, and in the level of dissatisfaction with their bodies. However, a diagnosis of bulimia nervosa should not be given when the disturbance occurs only during episodes of anorexia nervosa (Criterion E).

## Associated Features Supporting Diagnosis

Individuals with bulimia nervosa typically are within the normal weight or overweight range (body mass index [BMI]  $\geq 18.5$  and  $< 30$  in adults). The disorder occurs but is uncommon among obese individuals. Between eating binges, individuals with bulimia nervosa typically restrict their total caloric consumption and preferentially select low-calorie ("diet") foods while avoiding foods that they perceive to be fattening or likely to trigger a binge.

Menstrual irregularity or amenorrhea often occurs among females with bulimia nervosa; it is uncertain whether such disturbances are related to weight fluctuations, to nutritional deficiencies, or to emotional distress. The fluid and electrolyte disturbances resulting from the purging behavior are sometimes sufficiently severe to constitute medically serious problems. Rare but potentially fatal complications include esophageal tears, gastric rupture, and cardiac arrhythmias. Serious cardiac and skeletal myopathies have been reported among individuals following repeated use of syrup of ipecac to induce vomiting. Individuals who chronically abuse laxatives may become dependent on their use to stimulate bowel movements. Gastrointestinal symptoms are commonly associated with bulimia nervosa, and rectal prolapse has also been reported among individuals with this disorder.

## Prevalence

Twelve-month prevalence of bulimia nervosa among young females is 1%–1.5%. Point prevalence is highest among young adults since the disorder peaks in older adolescence and young adulthood. Less is known about the point prevalence of bulimia nervosa in males, but bulimia nervosa is far less common in males than it is in females, with an approximately 10:1 female-to-male ratio.

## Development and Course

Bulimia nervosa commonly begins in adolescence or young adulthood. Onset before puberty or after age 40 is uncommon. The binge eating frequently begins during or after an episode of dieting to lose weight. Experiencing multiple stressful life events also can precipitate onset of bulimia nervosa.

Disturbed eating behavior persists for at least several years in a high percentage of clinic samples. The course may be chronic or intermittent, with periods of remission alternating with recurrences of binge eating. However, over longer-term follow-up, the symptoms of many individuals appear to diminish with or without treatment, although treatment clearly impacts outcome. Periods of remission longer than 1 year are associated with better long-term outcome.

Significantly elevated risk for mortality (all-cause and suicide) has been reported for individuals with bulimia nervosa. The CMR (crude mortality rate) for bulimia nervosa is nearly 2% per decade.

Diagnostic cross-over from initial bulimia nervosa to anorexia nervosa occurs in a minority of cases (10%–15%). Individuals who do experience cross-over to anorexia nervosa commonly will revert back to bulimia nervosa or have multiple occurrences of cross-overs between these disorders. A subset of individuals with bulimia nervosa continue to binge eat but no longer engage in inappropriate compensatory behaviors, and therefore their

symptoms meet criteria for binge-eating disorder or other specified eating disorder. Diagnosis should be based on the current (i.e., past 3 months) clinical presentation.

## Risk and Prognostic Factors

**Temperamental.** Weight concerns, low self-esteem, depressive symptoms, social anxiety disorder, and overanxious disorder of childhood are associated with increased risk for the development of bulimia nervosa.

**Environmental.** Internalization of a thin body ideal has been found to increase risk for developing weight concerns, which in turn increase risk for the development of bulimia nervosa. Individuals who experienced childhood sexual or physical abuse are at increased risk for developing bulimia nervosa.

**Genetic and physiological.** Childhood obesity and early pubertal maturation increase risk for bulimia nervosa. Familial transmission of bulimia nervosa may be present, as well as genetic vulnerabilities for the disorder.

**Course modifiers.** Severity of psychiatric comorbidity predicts worse long-term outcome of bulimia nervosa.

## Culture-Related Diagnostic Issues

Bulimia nervosa has been reported to occur with roughly similar frequencies in most industrialized countries, including the United States, Canada, many European countries, Australia, Japan, New Zealand, and South Africa. In clinical studies of bulimia nervosa in the United States, individuals presenting with this disorder are primarily white. However, the disorder also occurs in other ethnic groups and with prevalence comparable to estimated prevalences observed in white samples.

## Gender-Related Diagnostic Issues

Bulimia nervosa is far more common in females than in males. Males are especially under-represented in treatment-seeking samples, for reasons that have not yet been systematically examined.

## Diagnostic Markers

No specific diagnostic test for bulimia nervosa currently exists. However, several laboratory abnormalities may occur as a consequence of purging and may increase diagnostic certainty. These include fluid and electrolyte abnormalities, such as hypokalemia (which can provoke cardiac arrhythmias), hypochloremia, and hyponatremia. The loss of gastric acid through vomiting may produce a metabolic alkalosis (elevated serum bicarbonate), and the frequent induction of diarrhea or dehydration through laxative and diuretic abuse can cause metabolic acidosis. Some individuals with bulimia nervosa exhibit mildly elevated levels of serum amylase, probably reflecting an increase in the salivary isoenzyme.

Physical examination usually yields no physical findings. However, inspection of the mouth may reveal significant and permanent loss of dental enamel, especially from lingual surfaces of the front teeth due to recurrent vomiting. These teeth may become chipped and appear ragged and "moth-eaten." There may also be an increased frequency of dental caries. In some individuals, the salivary glands, particularly the parotid glands, may become notably enlarged. Individuals who induce vomiting by manually stimulating the gag reflex may develop calluses or scars on the dorsal surface of the hand from repeated contact with the teeth. Serious cardiac and skeletal myopathies have been reported among individuals following repeated use of syrup of ipecac to induce vomiting.

## Suicide Risk

Suicide risk is elevated in bulimia nervosa. Comprehensive evaluation of individuals with this disorder should include assessment of suicide-related ideation and behaviors as well as other risk factors for suicide, including a history of suicide attempts.

## Functional Consequences of Bulimia Nervosa

Individuals with bulimia nervosa may exhibit a range of functional limitations associated with the disorder. A minority of individuals report severe role impairment, with the social-life domain most likely to be adversely affected by bulimia nervosa.

## Differential Diagnosis

**Anorexia nervosa, binge-eating/purging type.** Individuals whose binge-eating behavior occurs only during episodes of anorexia nervosa are given the diagnosis anorexia nervosa, binge-eating/purging type, and should not be given the additional diagnosis of bulimia nervosa. For individuals with an initial diagnosis of anorexia nervosa who binge and purge but whose presentation no longer meets the full criteria for anorexia nervosa, binge-eating/purging type (e.g., when weight is normal), a diagnosis of bulimia nervosa should be given only when all criteria for bulimia nervosa have been met for at least 3 months.

**Binge-eating disorder.** Some individuals binge eat but do not engage in regular inappropriate compensatory behaviors. In these cases, the diagnosis of binge-eating disorder should be considered.

**Kleine-Levin syndrome.** In certain neurological or other medical conditions, such as Kleine-Levin syndrome, there is disturbed eating behavior, but the characteristic psychological features of bulimia nervosa, such as overconcern with body shape and weight, are not present.

**Major depressive disorder, with atypical features.** Overeating is common in major depressive disorder, with atypical features, but individuals with this disorder do not engage in inappropriate compensatory behaviors and do not exhibit the excessive concern with body shape and weight characteristic of bulimia nervosa. If criteria for both disorders are met, both diagnoses should be given.

**Borderline personality disorder.** Binge-eating behavior is included in the impulsive behavior criterion that is part of the definition of borderline personality disorder. If the criteria for both borderline personality disorder and bulimia nervosa are met, both diagnoses should be given.

## Comorbidity

Comorbidity with mental disorders is common in individuals with bulimia nervosa, with most experiencing at least one other mental disorder and many experiencing multiple comorbidities. Comorbidity is not limited to any particular subset but rather occurs across a wide range of mental disorders. There is an increased frequency of depressive symptoms (e.g., low self-esteem) and bipolar and depressive disorders (particularly depressive disorders) in individuals with bulimia nervosa. In many individuals, the mood disturbance begins at the same time as or following the development of bulimia nervosa, and individuals often ascribe their mood disturbances to the bulimia nervosa. However, in some individuals, the mood disturbance clearly precedes the development of bulimia nervosa. There may also be an increased frequency of anxiety symptoms (e.g., fear of social situations) or anxiety disorders. These mood and anxiety disturbances frequently remit follow-

ing effective treatment of the bulimia nervosa. The lifetime prevalence of substance use, particularly alcohol or stimulant use, is at least 30% among individuals with bulimia nervosa. Stimulant use often begins in an attempt to control appetite and weight. A substantial percentage of individuals with bulimia nervosa also have personality features that meet criteria for one or more personality disorders, most frequently borderline personality disorder.

Binge-Eating Disorder

Diagnostic Criteria 307.51 (F50.8)

- A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:
  - 1. Eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than what most people would eat in a similar period of time under similar circumstances.
  - 2. A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).
- B. The binge-eating episodes are associated with three (or more) of the following:
  - 1. Eating much more rapidly than normal.
  - 2. Eating until feeling uncomfortably full.
  - 3. Eating large amounts of food when not feeling physically hungry.
  - 4. Eating alone because of feeling embarrassed by how much one is eating.
  - 5. Feeling disgusted with oneself, depressed, or very guilty afterward.
- C. Marked distress regarding binge eating is present.
- D. The binge eating occurs, on average, at least once a week for 3 months.
- E. The binge eating is not associated with the recurrent use of inappropriate compensatory behavior as in bulimia nervosa and does not occur exclusively during the course of bulimia nervosa or anorexia nervosa.

Specify if:

**In partial remission:** After full criteria for binge-eating disorder were previously met, binge eating occurs at an average frequency of less than one episode per week for a sustained period of time.

**In full remission:** After full criteria for binge-eating disorder were previously met, none of the criteria have been met for a sustained period of time.

Specify current severity:

The minimum level of severity is based on the frequency of episodes of binge eating (see below). The level of severity may be increased to reflect other symptoms and the degree of functional disability.

- Mild:** 1–3 binge-eating episodes per week.
- Moderate:** 4–7 binge-eating episodes per week.
- Severe:** 8–13 binge-eating episodes per week.
- Extreme:** 14 or more binge-eating episodes per week.

Diagnostic Features

The essential feature of binge-eating disorder is recurrent episodes binge eating that must occur, on average, at least once per week for 3 months (Criterion D). An “episode of binge eating” is defined as eating, in a discrete period of time, an amount of food that is defi-

nately larger than most people would eat in a similar period of time under similar circumstances (Criterion A1). The context in which the eating occurs may affect the clinician's estimation of whether the intake is excessive. For example, a quantity of food that might be regarded as excessive for a typical meal might be considered normal during a celebration or holiday meal. A "discrete period of time" refers to a limited period, usually less than 2 hours. A single episode of binge eating need not be restricted to one setting. For example, an individual may begin a binge in a restaurant and then continue to eat on returning home. Continual snacking on small amounts of food throughout the day would not be considered an eating binge.

An occurrence of excessive food consumption must be accompanied by a sense of lack of control (Criterion A2) to be considered an episode of binge eating. An indicator of loss of control is the inability to refrain from eating or to stop eating once started. Some individuals describe a dissociative quality during, or following, the binge-eating episodes. The impairment in control associated with binge eating may not be absolute; for example, an individual may continue binge eating while the telephone is ringing but will cease if a roommate or spouse unexpectedly enters the room. Some individuals report that their binge-eating episodes are no longer characterized by an acute feeling of loss of control but rather by a more generalized pattern of uncontrolled eating. If individuals report that they have abandoned efforts to control their eating, loss of control may still be considered as present. Binge eating can also be planned in some instances.

The type of food consumed during binges varies both across individuals and for a given individual. Binge eating appears to be characterized more by an abnormality in the amount of food consumed than by a craving for a specific nutrient.

Binge eating must be characterized by marked distress (Criterion C) and at least three of the following features: eating much more rapidly than normal; eating until feeling uncomfortably full; eating large amounts of food when not feeling physically hungry; eating alone because of feeling embarrassed by how much one is eating; and feeling disgusted with oneself, depressed, or very guilty afterward (Criterion B).

Individuals with binge-eating disorder are typically ashamed of their eating problems and attempt to conceal their symptoms. Binge eating usually occurs in secrecy or as inconspicuously as possible. The most common antecedent of binge eating is negative affect. Other triggers include interpersonal stressors; dietary restraint; negative feelings related to body weight, body shape, and food; and boredom. Binge eating may minimize or mitigate factors that precipitated the episode in the short-term, but negative self-evaluation and dysphoria often are the delayed consequences.

## **Associated Features Supporting Diagnosis**

Binge-eating disorder occurs in normal-weight/overweight and obese individuals. It is reliably associated with overweight and obesity in treatment-seeking individuals. Nevertheless, binge-eating disorder is distinct from obesity. Most obese individuals do not engage in recurrent binge eating. In addition, compared with weight-matched obese individuals without binge-eating disorder, those with the disorder consume more calories in laboratory studies of eating behavior and have greater functional impairment, lower quality of life, more subjective distress, and greater psychiatric comorbidity.

## **Prevalence**

Twelve-month prevalence of binge-eating disorder among U.S. adult (age 18 or older) females and males is 1.6% and 0.8%, respectively. The gender ratio is far less skewed in binge-eating disorder than in bulimia nervosa. Binge-eating disorder is as prevalent among females from racial or ethnic minority groups as has been reported for white females. The disorder is more prevalent among individuals seeking weight-loss treatment than in the general population.

## Development and Course

Little is known about the development of binge-eating disorder. Both binge eating and loss-of-control eating without objectively excessive consumption occur in children and are associated with increased body fat, weight gain, and increases in psychological symptoms. Binge eating is common in adolescent and college-age samples. Loss-of-control eating or episodic binge eating may represent a prodromal phase of eating disorders for some individuals.

Dieting follows the development of binge eating in many individuals with binge-eating disorder. (This is in contrast to bulimia nervosa, in which dysfunctional dieting usually precedes the onset of binge eating.) Binge-eating disorder typically begins in adolescence or young adulthood but can begin in later adulthood. Individuals with binge-eating disorder who seek treatment usually are older than individuals with either bulimia nervosa or anorexia nervosa who seek treatment.

Remission rates in both natural course and treatment outcome studies are higher for binge-eating disorder than for bulimia nervosa or anorexia nervosa. Binge-eating disorder appears to be relatively persistent, and the course is comparable to that of bulimia nervosa in terms of severity and duration. Crossover from binge-eating disorder to other eating disorders is uncommon.

## Risk and Prognostic Factors

**Genetic and physiological.** Binge-eating disorder appears to run in families, which may reflect additive genetic influences.

## Culture-Related Diagnostic Issues

Binge-eating disorder occurs with roughly similar frequencies in most industrialized countries, including the United States, Canada, many European countries, Australia, and New Zealand. In the United States, the prevalence of binge-eating disorder appears comparable among non-Latino whites, Latinos, Asians, and African Americans.

## Functional Consequences of Binge-Eating Disorder

Binge-eating disorder is associated with a range of functional consequences, including social role adjustment problems, impaired health-related quality of life and life satisfaction, increased medical morbidity and mortality, and associated increased health care utilization compared with body mass index (BMI)-matched control subjects. It may also be associated with an increased risk for weight gain and the development of obesity.

## Differential Diagnosis

**Bulimia nervosa.** Binge-eating disorder has recurrent binge eating in common with bulimia nervosa but differs from the latter disorder in some fundamental respects. In terms of clinical presentation, the recurrent inappropriate compensatory behavior (e.g., purging, driven exercise) seen in bulimia nervosa is absent in binge-eating disorder. Unlike individuals with bulimia nervosa, individuals with binge-eating disorder typically do not show marked or sustained dietary restriction designed to influence body weight and shape between binge-eating episodes. They may, however, report frequent attempts at dieting. Binge-eating disorder also differs from bulimia nervosa in terms of response to treatment. Rates of improvement are consistently higher among individuals with binge-eating disorder than among those with bulimia nervosa.

**Obesity.** Binge-eating disorder is associated with overweight and obesity but has several key features that are distinct from obesity. First, levels of overvaluation of body



weight and shape are higher in obese individuals with the disorder than in those without the disorder. Second, rates of psychiatric comorbidity are significantly higher among obese individuals with the disorder compared with those without the disorder. Third, the long-term successful outcome of evidence-based psychological treatments for binge-eating disorder can be contrasted with the absence of effective long-term treatments for obesity.

**Bipolar and depressive disorders.** Increases in appetite and weight gain are included in the criteria for major depressive episode and in the atypical features specifiers for depressive and bipolar disorders. Increased eating in the context of a major depressive episode may or may not be associated with loss of control. If the full criteria for both disorders are met, both diagnoses can be given. Binge eating and other symptoms of disordered eating are seen in association with bipolar disorder. If the full criteria for both disorders are met, both diagnoses should be given.

**Borderline personality disorder.** Binge eating is included in the impulsive behavior criterion that is part of the definition of borderline personality disorder. If the full criteria for both disorders are met, both diagnoses should be given.

## Comorbidity

Binge-eating disorder is associated with significant psychiatric comorbidity that is comparable to that of bulimia nervosa and anorexia nervosa. The most common comorbid disorders are bipolar disorders, depressive disorders, anxiety disorders, and, to a lesser degree, substance use disorders. The psychiatric comorbidity is linked to the severity of binge eating and not to the degree of obesity.

## Other Specified Feeding or Eating Disorder

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**307.59 (F50.8)**

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This category applies to presentations in which symptoms characteristic of a feeding and eating disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the feeding and eating disorders diagnostic class. The other specified feeding or eating disorder category is used in situations in which the clinician chooses to communicate the specific reason that the presentation does not meet the criteria for any specific feeding and eating disorder. This is done by recording “other specified feeding or eating disorder” followed by the specific reason (e.g., “bulimia nervosa of low frequency”).

Examples of presentations that can be specified using the “other specified” designation include the following:

1. **Atypical anorexia nervosa:** All of the criteria for anorexia nervosa are met, except that despite significant weight loss, the individual's weight is within or above the normal range.
2. **Bulimia nervosa (of low frequency and/or limited duration):** All of the criteria for bulimia nervosa are met, except that the binge eating and inappropriate compensatory behaviors occur, on average, less than once a week and/or for less than 3 months.
3. **Binge-eating disorder (of low frequency and/or limited duration):** All of the criteria for binge-eating disorder are met, except that the binge eating occurs, on average, less than once a week and/or for less than 3 months.
4. **Purging disorder:** Recurrent purging behavior to influence weight or shape (e.g., self-induced vomiting; misuse of laxatives, diuretics, or other medications) in the absence of binge eating.

## Gender Dysphoria

### Diagnostic Criteria

#### Gender Dysphoria in Children

**302.6 (F64.2)**

- A. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months' duration, as manifested by at least six of the following (one of which must be Criterion A1):
1. A strong desire to be of the other gender or an insistence that one is the other gender (or some alternative gender different from one's assigned gender).
  2. In boys (assigned gender), a strong preference for cross-dressing or simulating female attire; or in girls (assigned gender), a strong preference for wearing only typical masculine clothing and a strong resistance to the wearing of typical feminine clothing.
  3. A strong preference for cross-gender roles in make-believe play or fantasy play.
  4. A strong preference for the toys, games, or activities stereotypically used or engaged in by the other gender.
  5. A strong preference for playmates of the other gender.
  6. In boys (assigned gender), a strong rejection of typically masculine toys, games, and activities and a strong avoidance of rough-and-tumble play; or in girls (assigned gender), a strong rejection of typically feminine toys, games, and activities.
  7. A strong dislike of one's sexual anatomy.
  8. A strong desire for the primary and/or secondary sex characteristics that match one's experienced gender.
- B. The condition is associated with clinically significant distress or impairment in social, school, or other important areas of functioning.

*Specify if:*

**With a disorder of sex development** (e.g., a congenital adrenogenital disorder such as 255.2 [E25.0] congenital adrenal hyperplasia or 259.50 [E34.50] androgen insensitivity syndrome).

**Coding note:** Code the disorder of sex development as well as gender dysphoria.

#### Gender Dysphoria in Adolescents and Adults

**302.85 (F64.1)**

- A. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months' duration, as manifested by at least two of the following:
1. A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics (or in young adolescents, the anticipated secondary sex characteristics).
  2. A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender (or in young adolescents, a desire to prevent the development of the anticipated secondary sex characteristics).
  3. A strong desire for the primary and/or secondary sex characteristics of the other gender.
  4. A strong desire to be of the other gender (or some alternative gender different from one's assigned gender).
  5. A strong desire to be treated as the other gender (or some alternative gender different from one's assigned gender).
  6. A strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's assigned gender).

**B. The condition is associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning.**

*Specify if:*

**With a disorder of sex development** (e.g., a congenital adrenogenital disorder such as 255.2 [E25.0] congenital adrenal hyperplasia or 259.50 [E34.50] androgen insensitivity syndrome).

**Coding note:** Code the disorder of sex development as well as gender dysphoria.

*Specify if:*

**Posttransition:** The individual has transitioned to full-time living in the desired gender (with or without legalization of gender change) and has undergone (or is preparing to have) at least one cross-sex medical procedure or treatment regimen—namely, regular cross-sex hormone treatment or gender reassignment surgery confirming the desired gender (e.g., penectomy, vaginoplasty in a natal male; mastectomy or phalloplasty in a natal female).

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## Specifiers

The posttransition specifier may be used in the context of continuing treatment procedures that serve to support the new gender assignment.

## Diagnostic Features

Individuals with gender dysphoria have a marked incongruence between the gender they have been assigned to (usually at birth, referred to as *natal gender*) and their experienced/expressed gender. This discrepancy is the core component of the diagnosis. There must also be evidence of distress about this incongruence. Experienced gender may include alternative gender identities beyond binary stereotypes. Consequently, the distress is not limited to a desire to simply be of the other gender, but may include a desire to be of an alternative gender, provided that it differs from the individual's assigned gender.

Gender dysphoria manifests itself differently in different age groups. Prepubertal natal girls with gender dysphoria may express the wish to be a boy, assert they are a boy, or assert they will grow up to be a man. They prefer boys' clothing and hairstyles, are often perceived by strangers as boys, and may ask to be called by a boy's name. Usually, they display intense negative reactions to parental attempts to have them wear dresses or other feminine attire. Some may refuse to attend school or social events where such clothes are required. These girls may demonstrate marked cross-gender identification in role-playing, dreams, and fantasies. Contact sports, rough-and-tumble play, traditional boyhood games, and boys as playmates are most often preferred. They show little interest in stereotypically feminine toys (e.g., dolls) or activities (e.g., feminine dress-up or role-play). Occasionally, they refuse to urinate in a sitting position. Some natal girls may express a desire to have a penis or claim to have a penis or that they will grow one when older. They may also state that they do not want to develop breasts or menstruate.

Prepubertal natal boys with gender dysphoria may express the wish to be a girl or assert they are a girl or that they will grow up to be a woman. They have a preference for dressing in girls' or women's clothes or may improvise clothing from available materials (e.g., using towels, aprons, and scarves for long hair or skirts). These children may role-play female figures (e.g., playing "mother") and often are intensely interested in female fantasy figures. Traditional feminine activities, stereotypical games, and pastimes (e.g., "playing house"; drawing feminine pictures; watching television or videos of favorite female characters) are most often preferred. Stereotypical female-type dolls (e.g., Barbie) are often favorite toys, and girls are their preferred playmates. They avoid rough-and-tumble play and competitive sports and have little interest in stereotypically masculine toys (e.g., cars, trucks). Some may pretend not to have a penis and insist on sitting to urinate. More

rarely, they may state that they find their penis or testes disgusting, that they wish them removed, or that they have, or wish to have, a vagina.

In young adolescents with gender dysphoria, clinical features may resemble those of children or adults with the condition, depending on developmental level. As secondary sex characteristics of young adolescents are not yet fully developed, these individuals may not state dislike of them, but they are concerned about imminent physical changes.

In adults with gender dysphoria, the discrepancy between experienced gender and physical sex characteristics is often, but not always, accompanied by a desire to be rid of primary and/or secondary sex characteristics and/or a strong desire to acquire some primary and/or secondary sex characteristics of the other gender. To varying degrees, adults with gender dysphoria may adopt the behavior, clothing, and mannerisms of the experienced gender. They feel uncomfortable being regarded by others, or functioning in society, as members of their assigned gender. Some adults may have a strong desire to be of a different gender and treated as such, and they may have an inner certainty to feel and respond as the experienced gender without seeking medical treatment to alter body characteristics. They may find other ways to resolve the incongruence between experienced/expressed and assigned gender by partially living in the desired role or by adopting a gender role neither conventionally male nor conventionally female.

## Associated Features Supporting Diagnosis

When visible signs of puberty develop, natal boys may shave their legs at the first signs of hair growth. They sometimes bind their genitals to make erections less visible. Girls may bind their breasts, walk with a stoop, or use loose sweaters to make breasts less visible. Increasingly, adolescents request, or may obtain without medical prescription and supervision, hormonal suppressors ("blockers") of gonadal steroids (e.g., gonadotropin-releasing hormone [GnRH] analog, spironolactone). Clinically referred adolescents often want hormone treatment and many also wish for gender reassignment surgery. Adolescents living in an accepting environment may openly express the desire to be and be treated as the experienced gender and dress partly or completely as the experienced gender, have a hairstyle typical of the experienced gender, preferentially seek friendships with peers of the other gender, and/or adopt a new first name consistent with the experienced gender. Older adolescents, when sexually active, usually do not show or allow partners to touch their sexual organs. For adults with an aversion toward their genitals, sexual activity is constrained by the preference that their genitals not be seen or touched by their partners. Some adults may seek hormone treatment (sometimes without medical prescription and supervision) and gender reassignment surgery. Others are satisfied with either hormone treatment or surgery alone.

Adolescents and adults with gender dysphoria before gender reassignment are at increased risk for suicidal ideation, suicide attempts, and suicides. After gender reassignment, adjustment may vary, and suicide risk may persist.

## Prevalence

For natal adult males, prevalence ranges from 0.005% to 0.014%, and for natal females, from 0.002% to 0.003%. Since not all adults seeking hormone treatment and surgical reassignment attend specialty clinics, these rates are likely modest underestimates. Sex differences in rate of referrals to specialty clinics vary by age group. In children, sex ratios of natal boys to girls range from 2:1 to 4.5:1. In adolescents, the sex ratio is close to parity; in adults, the sex ratio favors natal males, with ratios ranging from 1:1 to 6.1:1. In two countries, the sex ratio appears to favor natal females (Japan: 2.2:1; Poland: 3.4:1).

## Development and Course

Because expression of gender dysphoria varies with age, there are separate criteria sets for children versus adolescents and adults. Criteria for children are defined in a more con-

crete, behavioral manner than those for adolescents and adults. Many of the core criteria draw on well-documented behavioral gender differences between typically developing boys and girls. Young children are less likely than older children, adolescents, and adults to express extreme and persistent anatomic dysphoria. In adolescents and adults, incongruence between experienced gender and somatic sex is a central feature of the diagnosis. Factors related to distress and impairment also vary with age. A very young child may show signs of distress (e.g., intense crying) only when parents tell the child that he or she is “really” not a member of the other gender but only “desires” to be. Distress may not be manifest in social environments supportive of the child’s desire to live in the role of the other gender and may emerge only if the desire is interfered with. In adolescents and adults, distress may manifest because of strong incongruence between experienced gender and somatic sex. Such distress may, however, be mitigated by supportive environments and knowledge that biomedical treatments exist to reduce incongruence. Impairment (e.g., school refusal, development of depression, anxiety, and substance abuse) may be a consequence of gender dysphoria.

**Gender dysphoria without a disorder of sex development.** For clinic-referred children, onset of cross-gender behaviors is usually between ages 2 and 4 years. This corresponds to the developmental time period in which most typically developing children begin expressing gendered behaviors and interests. For some preschool-age children, both pervasive cross-gender behaviors and the expressed desire to be the other gender may be present, or, more rarely, labeling oneself as a member of the other gender may occur. In some cases, the expressed desire to be the other gender appears later, usually at entry into elementary school. A small minority of children express discomfort with their sexual anatomy or will state the desire to have a sexual anatomy corresponding to the experienced gender (“anatomic dysphoria”). Expressions of anatomic dysphoria become more common as children with gender dysphoria approach and anticipate puberty.

Rates of persistence of gender dysphoria from childhood into adolescence or adulthood vary. In natal males, persistence has ranged from 2.2% to 30%. In natal females, persistence has ranged from 12% to 50%. Persistence of gender dysphoria is modestly correlated with dimensional measures of severity ascertained at the time of a childhood baseline assessment. In one sample of natal males, lower socioeconomic background was also modestly correlated with persistence. It is unclear if particular therapeutic approaches to gender dysphoria in children are related to rates of long-term persistence. Extant follow-up samples consisted of children receiving no formal therapeutic intervention or receiving therapeutic interventions of various types, ranging from active efforts to reduce gender dysphoria to a more neutral, “watchful waiting” approach. It is unclear if children “encouraged” or supported to live socially in the desired gender will show higher rates of persistence, since such children have not yet been followed longitudinally in a systematic manner. For both natal male and female children showing persistence, almost all are sexually attracted to individuals of their natal sex. For natal male children whose gender dysphoria does not persist, the majority are *androphilic* (sexually attracted to males) and often self-identify as gay or homosexual (ranging from 63% to 100%). In natal female children whose gender dysphoria does not persist, the percentage who are *gynephilic* (sexually attracted to females) and self-identify as lesbian is lower (ranging from 32% to 50%).

In both adolescent and adult natal males, there are two broad trajectories for development of gender dysphoria: early onset and late onset. *Early-onset gender dysphoria* starts in childhood and continues into adolescence and adulthood; or, there is an intermittent period in which the gender dysphoria desists and these individuals self-identify as gay or homosexual, followed by recurrence of gender dysphoria. *Late-onset gender dysphoria* occurs around puberty or much later in life. Some of these individuals report having had a desire to be of the other gender in childhood that was not expressed verbally to others. Others do not recall any signs of childhood gender dysphoria. For adolescent males with late-onset gender dysphoria, parents often report surprise because they did not see signs of gender

dysphoria during childhood. Expressions of anatomic dysphoria are more common and salient in adolescents and adults once secondary sex characteristics have developed.

Adolescent and adult natal males with early-onset gender dysphoria are almost always sexually attracted to men (androphilic). Adolescents and adults with late-onset gender dysphoria frequently engage in transvestic behavior with sexual excitement. The majority of these individuals are gynephilic or sexually attracted to other posttransition natal males with late-onset gender dysphoria. A substantial percentage of adult males with late-onset gender dysphoria cohabit with or are married to natal females. After gender transition, many self-identify as lesbian. Among adult natal males with gender dysphoria, the early-onset group seeks out clinical care for hormone treatment and reassignment surgery at an earlier age than does the late-onset group. The late-onset group may have more fluctuations in the degree of gender dysphoria and be more ambivalent about and less likely satisfied after gender reassignment surgery.

In both adolescent and adult natal females, the most common course is the early-onset form of gender dysphoria. The late-onset form is much less common in natal females compared with natal males. As in natal males with gender dysphoria, there may have been a period in which the gender dysphoria desisted and these individuals self-identified as lesbian; however, with recurrence of gender dysphoria, clinical consultation is sought, often with the desire for hormone treatment and reassignment surgery. Parents of natal adolescent females with the late-onset form also report surprise, as no signs of childhood gender dysphoria were evident. Expressions of anatomic dysphoria are much more common and salient in adolescents and adults than in children.

Adolescent and adult natal females with early-onset gender dysphoria are almost always gynephilic. Adolescents and adults with the late-onset form of gender dysphoria are usually androphilic and after gender transition self-identify as gay men. Natal females with the late-onset form do not have co-occurring transvestic behavior with sexual excitement.

**Gender dysphoria in association with a disorder of sex development.** Most individuals with a disorder of sex development who develop gender dysphoria have already come to medical attention at an early age. For many, starting at birth, issues of gender assignment were raised by physicians and parents. Moreover, as infertility is quite common for this group, physicians are more willing to perform cross-sex hormone treatments and genital surgery before adulthood.

Disorders of sex development in general are frequently associated with gender-atypical behavior starting in early childhood. However, in the majority of cases, this does not lead to gender dysphoria. As individuals with a disorder of sex development become aware of their medical history and condition, many experience uncertainty about their gender, as opposed to developing a firm conviction that they are another gender. However, most do not progress to gender transition. Gender dysphoria and gender transition may vary considerably as a function of a disorder of sex development, its severity, and assigned gender.

## Risk and Prognostic Factors

**Temperamental.** For individuals with gender dysphoria without a disorder of sex development, atypical gender behavior among individuals with early-onset gender dysphoria develops in early preschool age, and it is possible that a high degree of atypicality makes the development of gender dysphoria and its persistence into adolescence and adulthood more likely.

**Environmental.** Among individuals with gender dysphoria without a disorder of sex development, males with gender dysphoria (in both childhood and adolescence) more commonly have older brothers than do males without the condition. Additional predisposing

factors under consideration, especially in individuals with late-onset gender dysphoria (adulthood), include habitual fetishistic transvestism developing into autogynephilia (i.e., sexual arousal associated with the thought or image of oneself as a woman) and other forms of more general social, psychological, or developmental problems.

**Genetic and physiological.** For individuals with gender dysphoria without a disorder of sex development, some genetic contribution is suggested by evidence for (weak) familiality of transsexualism among nontwin siblings, increased concordance for transsexualism in monozygotic compared with dizygotic same-sex twins, and some degree of heritability of gender dysphoria. As to endocrine findings, no endogenous systemic abnormalities in sex-hormone levels have been found in 46,XY individuals, whereas there appear to be increased androgen levels (in the range found in hirsute women but far below normal male levels) in 46,XX individuals. Overall, current evidence is insufficient to label gender dysphoria without a disorder of sex development as a form of intersexuality limited to the central nervous system.

In gender dysphoria associated with a disorder of sex development, the likelihood of later gender dysphoria is increased if prenatal production and utilization (via receptor sensitivity) of androgens are grossly atypical relative to what is usually seen in individuals with the same assigned gender. Examples include 46,XY individuals with a history of normal male prenatal hormone milieu but inborn nonhormonal genital defects (as in cloacal bladder exstrophy or penile agenesis) and who have been assigned to the female gender. The likelihood of gender dysphoria is further enhanced by additional, prolonged, highly gender-atypical postnatal androgen exposure with somatic virilization as may occur in female-raised and noncastrated 46,XY individuals with 5-alpha reductase-2 deficiency or 17-beta-hydroxysteroid dehydrogenase-3 deficiency or in female-raised 46,XX individuals with classical congenital adrenal hyperplasia with prolonged periods of non-adherence to glucocorticoid replacement therapy. However, the prenatal androgen milieu is more closely related to gendered behavior than to gender identity. Many individuals with disorders of sex development and markedly gender-atypical behavior do not develop gender dysphoria. Thus, gender-atypical behavior by itself should not be interpreted as an indicator of current or future gender dysphoria. There appears to be a higher rate of gender dysphoria and patient-initiated gender change from assigned female to male than from assigned male to female in 46,XY individuals with a disorder of sex development.

## Culture-Related Diagnostic Issues

Individuals with gender dysphoria have been reported across many countries and cultures. The equivalent of gender dysphoria has also been reported in individuals living in cultures with institutionalized gender categories other than male or female. It is unclear whether with these individuals the diagnostic criteria for gender dysphoria would be met.

## Diagnostic Markers

Individuals with a somatic disorder of sex development show some correlation of final gender identity outcome with the degree of prenatal androgen production and utilization. However, the correlation is not robust enough for the biological factor, where ascertainable, to replace a detailed and comprehensive diagnostic interview evaluation for gender dysphoria.

## Functional Consequences of Gender Dysphoria

Preoccupation with cross-gender wishes may develop at all ages after the first 2–3 years of childhood and often interfere with daily activities. In older children, failure to develop age-typical same-sex peer relationships and skills may lead to isolation from peer groups and to distress. Some children may refuse to attend school because of teasing and harass-

ment or pressure to dress in attire associated with their assigned sex. Also in adolescents and adults, preoccupation with cross-gender wishes often interferes with daily activities. Relationship difficulties, including sexual relationship problems, are common, and functioning at school or at work may be impaired. Gender dysphoria, along with atypical gender expression, is associated with high levels of stigmatization, discrimination, and victimization, leading to negative self-concept, increased rates of mental disorder comorbidity, school dropout, and economic marginalization, including unemployment, with attendant social and mental health risks, especially in individuals from resource-poor family backgrounds. In addition, these individuals' access to health services and mental health services may be impeded by structural barriers, such as institutional discomfort or inexperience in working with this patient population.

## Differential Diagnosis

**Nonconformity to gender roles.** Gender dysphoria should be distinguished from simple nonconformity to stereotypical gender role behavior by the strong desire to be of another gender than the assigned one and by the extent and pervasiveness of gender-variant activities and interests. The diagnosis is not meant to merely describe nonconformity to stereotypical gender role behavior (e.g., "tomboyism" in girls, "girly-boy" behavior in boys, occasional cross-dressing in adult men). Given the increased openness of atypical gender expressions by individuals across the entire range of the transgender spectrum, it is important that the clinical diagnosis be limited to those individuals whose distress and impairment meet the specified criteria.

**Transvestic disorder.** Transvestic disorder occurs in heterosexual (or bisexual) adolescent and adult males (rarely in females) for whom cross-dressing behavior generates sexual excitement and causes distress and/or impairment without drawing their primary gender into question. It is occasionally accompanied by gender dysphoria. An individual with transvestic disorder who also has clinically significant gender dysphoria can be given both diagnoses. In many cases of late-onset gender dysphoria in gynephilic natal males, transvestic behavior with sexual excitement is a precursor.

**Body dysmorphic disorder.** An individual with body dysmorphic disorder focuses on the alteration or removal of a specific body part because it is perceived as abnormally formed, not because it represents a repudiated assigned gender. When an individual's presentation meets criteria for both gender dysphoria and body dysmorphic disorder, both diagnoses can be given. Individuals wishing to have a healthy limb amputated (termed by some *body integrity identity disorder*) because it makes them feel more "complete" usually do not wish to change gender, but rather desire to live as an amputee or a disabled person.

**Schizophrenia and other psychotic disorders.** In schizophrenia, there may rarely be delusions of belonging to some other gender. In the absence of psychotic symptoms, insistence by an individual with gender dysphoria that he or she is of some other gender is not considered a delusion. Schizophrenia (or other psychotic disorders) and gender dysphoria may co-occur.

**Other clinical presentations.** Some individuals with an emasculation desire who develop an alternative, nonmale/nonfemale gender identity do have a presentation that meets criteria for gender dysphoria. However, some males seek castration and/or penectomy for aesthetic reasons or to remove psychological effects of androgens without changing male identity; in these cases, the criteria for gender dysphoria are not met.

## Comorbidity

Clinically referred children with gender dysphoria show elevated levels of emotional and behavioral problems—most commonly, anxiety, disruptive and impulse-control, and de-



pressive disorders. In prepubertal children, increasing age is associated with having more behavioral or emotional problems; this is related to the increasing non-acceptance of gender-variant behavior by others. In older children, gender-variant behavior often leads to peer ostracism, which may lead to more behavioral problems. The prevalence of mental health problems differs among cultures; these differences may also be related to differences in attitudes toward gender variance in children. However, also in some non-Western cultures, anxiety has been found to be relatively common in individuals with gender dysphoria, even in cultures with accepting attitudes toward gender-variant behavior. Autism spectrum disorder is more prevalent in clinically referred children with gender dysphoria than in the general population. Clinically referred adolescents with gender dysphoria appear to have comorbid mental disorders, with anxiety and depressive disorders being the most common. As in children, autism spectrum disorder is more prevalent in clinically referred adolescents with gender dysphoria than in the general population. Clinically referred adults with gender dysphoria may have coexisting mental health problems, most commonly anxiety and depressive disorders.

# Other Specified Gender Dysphoria

302.6 (F64.8)

This category applies to presentations in which symptoms characteristic of gender dysphoria that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for gender dysphoria. The other specified gender dysphoria category is used in situations in which the clinician chooses to communicate the specific reason that the presentation does not meet the criteria for gender dysphoria. This is done by recording “other specified gender dysphoria” followed by the specific reason (e.g., “brief gender dysphoria”).

An example of a presentation that can be specified using the “other specified” designation is the following:

**The current disturbance meets symptom criteria for gender dysphoria, but the duration is less than 6 months.**

# Unspecified Gender Dysphoria

302.6 (F64.9)

This category applies to presentations in which symptoms characteristic of gender dysphoria that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for gender dysphoria. The unspecified gender dysphoria category is used in situations in which the clinician chooses *not* to specify the reason that the criteria are not met for gender dysphoria, and includes presentations in which there is insufficient information to make a more specific diagnosis.

**Delirium, major neurocognitive disorder, and personality change due to another medical condition, aggressive type.** A diagnosis of intermittent explosive disorder should not be made when aggressive outbursts are judged to result from the physiological effects of another diagnosable medical condition (e.g., brain injury associated with a change in personality characterized by aggressive outbursts; complex partial epilepsy). Nonspecific abnormalities on neurological examination (e.g., “soft signs”) and nonspecific electroencephalographic changes are compatible with a diagnosis of intermittent explosive disorder unless there is a diagnosable medical condition that better explains the impulsive aggressive outbursts.

**Substance intoxication or substance withdrawal.** A diagnosis of intermittent explosive disorder should not be made when impulsive aggressive outbursts are nearly always associated with intoxication with or withdrawal from substances (e.g., alcohol, phencyclidine, cocaine and other stimulants, barbiturates, inhalants). However, when a sufficient number of impulsive aggressive outbursts also occur in the absence of substance intoxication or withdrawal, and these warrant independent clinical attention, a diagnosis of intermittent explosive disorder may be given.

**Attention-deficit/hyperactivity disorder, conduct disorder, oppositional defiant disorder, or autism spectrum disorder.** Individuals with any of these childhood-onset disorders may exhibit impulsive aggressive outbursts. Individuals with ADHD are typically impulsive and, as a result, may also exhibit impulsive aggressive outbursts. While individuals with conduct disorder can exhibit impulsive aggressive outbursts, the form of aggression characterized by the diagnostic criteria is proactive and predatory. Aggression in oppositional defiant disorder is typically characterized by temper tantrums and verbal arguments with authority figures, whereas impulsive aggressive outbursts in intermittent explosive disorder are in response to a broader array of provocation and include physical assault. The level of impulsive aggression in individuals with a history of one or more of these disorders has been reported as lower than that in comparable individuals whose symptoms also meet intermittent explosive disorder Criteria A through E. Accordingly, if Criteria A through E are also met, and the impulsive aggressive outbursts warrant independent clinical attention, a diagnosis of intermittent explosive disorder may be given.

## Comorbidity

Depressive disorders, anxiety disorders, and substance use disorders are most commonly comorbid with intermittent explosive disorder. In addition, individuals with antisocial personality disorder or borderline personality disorder, and individuals with a history of disorders with disruptive behaviors (e.g., ADHD, conduct disorder, oppositional defiant disorder), are at greater risk for comorbid intermittent explosive disorder.

## Conduct Disorder

### Diagnostic Criteria

**A.** A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of at least three of the following 15 criteria in the past 12 months from any of the categories below, with at least one criterion present in the past 6 months:

#### **Aggression to People and Animals**

1. Often bullies, threatens, or intimidates others.
2. Often initiates physical fights.
3. Has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife, gun).

4. Has been physically cruel to people.
5. Has been physically cruel to animals.
6. Has stolen while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery).
7. Has forced someone into sexual activity.

#### **Destruction of Property**

8. Has deliberately engaged in fire setting with the intention of causing serious damage.
9. Has deliberately destroyed others' property (other than by fire setting).

#### **Deceitfulness or Theft**

10. Has broken into someone else's house, building, or car.
11. Often lies to obtain goods or favors or to avoid obligations (i.e., "cons" others).
12. Has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without breaking and entering; forgery).

#### **Serious Violations of Rules**

13. Often stays out at night despite parental prohibitions, beginning before age 13 years.
  14. Has run away from home overnight at least twice while living in the parental or parental surrogate home, or once without returning for a lengthy period.
  15. Is often truant from school, beginning before age 13 years.
- B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.
- C. If the individual is age 18 years or older, criteria are not met for antisocial personality disorder.

*Specify whether:*

**312.81 (F91.1) Childhood-onset type:** Individuals show at least one symptom characteristic of conduct disorder prior to age 10 years.

**312.82 (F91.2) Adolescent-onset type:** Individuals show no symptom characteristic of conduct disorder prior to age 10 years.

**312.89 (F91.9) Unspecified onset:** Criteria for a diagnosis of conduct disorder are met, but there is not enough information available to determine whether the onset of the first symptom was before or after age 10 years.

*Specify if:*

**With limited prosocial emotions:** To qualify for this specifier, an individual must have displayed at least two of the following characteristics persistently over at least 12 months and in multiple relationships and settings. These characteristics reflect the individual's typical pattern of interpersonal and emotional functioning over this period and not just occasional occurrences in some situations. Thus, to assess the criteria for the specifier, multiple information sources are necessary. In addition to the individual's self-report, it is necessary to consider reports by others who have known the individual for extended periods of time (e.g., parents, teachers, co-workers, extended family members, peers).

**Lack of remorse or guilt:** Does not feel bad or guilty when he or she does something wrong (exclude remorse when expressed only when caught and/or facing punishment). The individual shows a general lack of concern about the negative consequences of his or her actions. For example, the individual is not remorseful after hurting someone or does not care about the consequences of breaking rules.

**Callous—lack of empathy:** Disregards and is unconcerned about the feelings of others. The individual is described as cold and uncaring. The person appears more concerned about the effects of his or her actions on himself or herself, rather than their effects on others, even when they result in substantial harm to others.

**Unconcerned about performance:** Does not show concern about poor/problematic performance at school, at work, or in other important activities. The individual does not put forth the effort necessary to perform well, even when expectations are clear, and typically blames others for his or her poor performance.

**Shallow or deficient affect:** Does not express feelings or show emotions to others, except in ways that seem shallow, insincere, or superficial (e.g., actions contradict the emotion displayed; can turn emotions “on” or “off” quickly) or when emotional expressions are used for gain (e.g., emotions displayed to manipulate or intimidate others).

*Specify current severity:*

**Mild:** Few if any conduct problems in excess of those required to make the diagnosis are present, and conduct problems cause relatively minor harm to others (e.g., lying, truancy, staying out after dark without permission, other rule breaking).

**Moderate:** The number of conduct problems and the effect on others are intermediate between those specified in “mild” and those in “severe” (e.g., stealing without confronting a victim, vandalism).

**Severe:** Many conduct problems in excess of those required to make the diagnosis are present, or conduct problems cause considerable harm to others (e.g., forced sex, physical cruelty, use of a weapon, stealing while confronting a victim, breaking and entering).

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## Subtypes

Three subtypes of conduct disorder are provided based on the age at onset of the disorder. Onset is most accurately estimated with information from both the youth and the caregiver; estimates are often 2 years later than actual onset. Both subtypes can occur in a mild, moderate, or severe form. An unspecified-onset subtype is designated when there is insufficient information to determine age at onset.

In childhood-onset conduct disorder, individuals are usually male, frequently display physical aggression toward others, have disturbed peer relationships, may have had oppositional defiant disorder during early childhood, and usually have symptoms that meet full criteria for conduct disorder prior to puberty. Many children with this subtype also have concurrent attention-deficit/hyperactivity disorder (ADHD) or other neurodevelopmental difficulties. Individuals with childhood-onset type are more likely to have persistent conduct disorder into adulthood than are those with adolescent-onset type. As compared with individuals with childhood-onset type, individuals with adolescent-onset conduct disorder are less likely to display aggressive behaviors and tend to have more normative peer relationships (although they often display conduct problems in the company of others). These individuals are less likely to have conduct disorder that persists into adulthood. The ratio of males to females with conduct disorder is more balanced for the adolescent-onset type than for the childhood-onset type.

## Specifiers

A minority of individuals with conduct disorder exhibit characteristics that qualify for the “with limited prosocial emotions” specifier. The indicators of this specifier are those that have often been labeled as callous and unemotional traits in research. Other personality features, such as thrill seeking, fearlessness, and insensitivity to punishment, may also distinguish those with characteristics described in the specifier. Individuals with characteristics described in this specifier may be more likely than other individuals with conduct disorder to engage in aggression that is planned for instrumental gain. Individuals with conduct disorder of any subtype or any level of severity can have characteristics that qualify for the specifier “with limited prosocial emotions,” although individuals with the specifier are more likely to have childhood-onset type and a severity specifier rating of severe.

Although the validity of self-report to assess the presence of the specifier has been supported in some research contexts, individuals with conduct disorder with this specifier may not readily admit to the traits in a clinical interview. Thus, to assess the criteria for the specifier, multiple information sources are necessary. Also, because the indicators of the specifier are characteristics that reflect the individual's typical pattern of interpersonal and emotional functioning, it is important to consider reports by others who have known the individual for extended periods of time and across relationships and settings (e.g., parents, teachers, co-workers, extended family members, peers).

## Diagnostic Features

The essential feature of conduct disorder is a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated (Criterion A). These behaviors fall into four main groupings: aggressive conduct that causes or threatens physical harm to other people or animals (Criteria A1–A7); non-aggressive conduct that causes property loss or damage (Criteria A8–A9); deceitfulness or theft (Criteria A10–A12); and serious violations of rules (Criteria A13–A15). Three or more characteristic behaviors must have been present during the past 12 months, with at least one behavior present in the past 6 months. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning (Criterion B). The behavior pattern is usually present in a variety of settings, such as home, at school, or in the community. Because individuals with conduct disorder are likely to minimize their conduct problems, the clinician often must rely on additional informants. However, informants' knowledge of the individual's conduct problems may be limited if they have inadequately supervised the individual or the individual has concealed symptom behaviors.

Individuals with conduct disorder often initiate aggressive behavior and react aggressively to others. They may display bullying, threatening, or intimidating behavior (including bullying via messaging on Web-based social media) (Criterion A1); initiate frequent physical fights (Criterion A2); use a weapon that can cause serious physical harm (e.g., a bat, brick, broken bottle, knife, gun) (Criterion A3); be physically cruel to people (Criterion A4) or animals (Criterion A5); steal while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery) (Criterion A6); or force someone into sexual activity (Criterion A7). Physical violence may take the form of rape, assault, or, in rare cases, homicide. Deliberate destruction of others' property may include deliberate fire setting with the intention of causing serious damage (Criterion A8) or deliberate destroying of other people's property in other ways (e.g., smashing car windows, vandalizing school property) (Criterion A9). Acts of deceitfulness or theft may include breaking into someone else's house, building, or car (Criterion A10); frequently lying or breaking promises to obtain goods or favors or to avoid debts or obligations (e.g., "conning" other individuals) (Criterion A11); or stealing items of non-trivial value without confronting the victim (e.g., shoplifting, forgery, fraud) (Criterion A12).

Individuals with conduct disorder may also frequently commit serious violations of rules (e.g., school, parental, workplace). Children with conduct disorder often have a pattern, beginning before age 13 years, of staying out late at night despite parental prohibitions (Criterion A13). Children may also show a pattern of running away from home overnight (Criterion A14). To be considered a symptom of conduct disorder, the running away must have occurred at least twice (or only once if the individual did not return for a lengthy period). Runaway episodes that occur as a direct consequence of physical or sexual abuse do not typically qualify for this criterion. Children with conduct disorder may often be truant from school, beginning prior to age 13 years (Criterion A15).

## Associated Features Supporting Diagnosis

Especially in ambiguous situations, aggressive individuals with conduct disorder frequently misperceive the intentions of others as more hostile and threatening than is the

case and respond with aggression that they then feel is reasonable and justified. Personality features of trait negative emotionality and poor self-control, including poor frustration tolerance, irritability, temper outbursts, suspiciousness, insensitivity to punishment, thrill seeking, and recklessness, frequently co-occur with conduct disorder. Substance misuse is often an associated feature, particularly in adolescent females. Suicidal ideation, suicide attempts, and completed suicide occur at a higher-than-expected rate in individuals with conduct disorder.

## Prevalence

One-year population prevalence estimates range from 2% to more than 10%, with a median of 4%. The prevalence of conduct disorder appears to be fairly consistent across various countries that differ in race and ethnicity. Prevalence rates rise from childhood to adolescence and are higher among males than among females. Few children with impairing conduct disorder receive treatment.

## Development and Course

The onset of conduct disorder may occur as early as the preschool years, but the first significant symptoms usually emerge during the period from middle childhood through middle adolescence. Oppositional defiant disorder is a common precursor to the childhood-onset type of conduct disorder. Conduct disorder may be diagnosed in adults, however, symptoms of conduct disorder usually emerge in childhood or adolescence, and onset is rare after age 16 years. The course of conduct disorder after onset is variable. In a majority of individuals, the disorder remits by adulthood. Many individuals with conduct disorder—particularly those with adolescent-onset type and those with few and milder symptoms—achieve adequate social and occupational adjustment as adults. However, the early-onset type predicts a worse prognosis and an increased risk of criminal behavior, conduct disorder, and substance-related disorders in adulthood. Individuals with conduct disorder are at risk for later mood disorders, anxiety disorders, posttraumatic stress disorder, impulse-control disorders, psychotic disorders, somatic symptom disorders, and substance-related disorders as adults.

Symptoms of the disorder vary with age as the individual develops increased physical strength, cognitive abilities, and sexual maturity. Symptom behaviors that emerge first tend to be less serious (e.g., lying, shoplifting), whereas conduct problems that emerge last tend to be more severe (e.g., rape, theft while confronting a victim). However, there are wide differences among individuals, with some engaging in the more damaging behaviors at an early age (which is predictive of a worse prognosis). When individuals with conduct disorder reach adulthood, symptoms of aggression, property destruction, deceitfulness, and rule violation, including violence against co-workers, partners, and children, may be exhibited in the workplace and the home, such that antisocial personality disorder may be considered.

## Risk and Prognostic Factors

**Temperamental.** Temperamental risk factors include a difficult undercontrolled infant temperament and lower-than-average intelligence, particularly with regard to verbal IQ.

**Environmental.** Family-level risk factors include parental rejection and neglect, inconsistent child-rearing practices, harsh discipline, physical or sexual abuse, lack of supervision, early institutional living, frequent changes of caregivers, large family size, parental criminality, and certain kinds of familial psychopathology (e.g., substance-related disorders). Community-level risk factors include peer rejection, association with a delinquent peer group, and neighborhood exposure to violence. Both types of risk factors tend to be more common and severe among individuals with the childhood-onset subtype of conduct disorder.

**Genetic and physiological.** Conduct disorder is influenced by both genetic and environmental factors. The risk is increased in children with a biological or adoptive parent or a sibling with conduct disorder. The disorder also appears to be more common in children of biological parents with severe alcohol use disorder, depressive and bipolar disorders, or schizophrenia or biological parents who have a history of ADHD or conduct disorder. Family history particularly characterizes individuals with the childhood-onset subtype of conduct disorder. Slower resting heart rate has been reliably noted in individuals with conduct disorder compared with those without the disorder, and this marker is not characteristic of any other mental disorder. Reduced autonomic fear conditioning, particularly low skin conductance, is also well documented. However, these psychophysiological findings are not diagnostic of the disorder. Structural and functional differences in brain areas associated with affect regulation and affect processing, particularly frontotemporal-limbic connections involving the brain's ventral prefrontal cortex and amygdala, have been consistently noted in individuals with conduct disorder compared with those without the disorder. However, neuroimaging findings are not diagnostic of the disorder.

**Course modifiers.** Persistence is more likely for individuals with behaviors that meet criteria for the childhood-onset subtype and qualify for the specifier "with limited prosocial emotions". The risk that conduct disorder will persist is also increased by co-occurring ADHD and by substance abuse.

## Culture-Related Diagnostic Issues

Conduct disorder diagnosis may at times be potentially misapplied to individuals in settings where patterns of disruptive behavior are viewed as near-normative (e.g., in very threatening, high-crime areas or war zones). Therefore, the context in which the undesirable behaviors have occurred should be considered.

## Gender-Related Diagnostic Issues

Males with a diagnosis of conduct disorder frequently exhibit fighting, stealing, vandalism, and school discipline problems. Females with a diagnosis of conduct disorder are more likely to exhibit lying, truancy, running away, substance use, and prostitution. Whereas males tend to exhibit both physical aggression and relational aggression (behavior that harms social relationships of others), females tend to exhibit relatively more relational aggression.

## Functional Consequences of Conduct Disorder

Conduct disorder behaviors may lead to school suspension or expulsion, problems in work adjustment, legal difficulties, sexually transmitted diseases, unplanned pregnancy, and physical injury from accidents or fights. These problems may preclude attendance in ordinary schools or living in a parental or foster home. Conduct disorder is often associated with an early onset of sexual behavior, alcohol use, tobacco smoking, use of illegal substances, and reckless and risk-taking acts. Accident rates appear to be higher among individuals with conduct disorder compared with those without the disorder. These functional consequences of conduct disorder may predict health difficulties when individuals reach midlife. It is not uncommon for individuals with conduct disorder to come into contact with the criminal justice system for engaging in illegal behavior. Conduct disorder is a common reason for treatment referral and is frequently diagnosed in mental health facilities for children, especially in forensic practice. It is associated with impairment that is more severe and chronic than that experienced by other clinic-referred children.

## Differential Diagnosis

**Oppositional defiant disorder.** Conduct disorder and oppositional defiant disorder are both related to symptoms that bring the individual in conflict with adults and other au-

thority figures (e.g., parents, teachers, work supervisors). The behaviors of oppositional defiant disorder are typically of a less severe nature than those of individuals with conduct disorder and do not include aggression toward individuals or animals, destruction of property, or a pattern of theft or deceit. Furthermore, oppositional defiant disorder includes problems of emotional dysregulation (i.e., angry and irritable mood) that are not included in the definition of conduct disorder. When criteria are met for both oppositional defiant disorder and conduct disorder, both diagnoses can be given.

**Attention-deficit/hyperactivity disorder.** Although children with ADHD often exhibit hyperactive and impulsive behavior that may be disruptive, this behavior does not by itself violate societal norms or the rights of others and therefore does not usually meet criteria for conduct disorder. When criteria are met for both ADHD and conduct disorder, both diagnoses should be given.

**Depressive and bipolar disorders.** Irritability, aggression, and conduct problems can occur in children or adolescents with a major depressive disorder, a bipolar disorder, or disruptive mood dysregulation disorder. The behavioral problems associated with these mood disorders can usually be distinguished from the pattern of conduct problems seen in conduct disorder based on their course. Specifically, persons with conduct disorder will display substantial levels of aggressive or non-aggressive conduct problems during periods in which there is no mood disturbance, either historically (i.e., a history of conduct problems predating the onset of the mood disturbance) or concurrently (i.e., display of some conduct problems that are premeditated and do not occur during periods of intense emotional arousal). In those cases in which criteria for conduct disorder and a mood disorder are met, both diagnoses can be given.

**Intermittent explosive disorder.** Both conduct disorder and intermittent explosive disorder involve high rates of aggression. However, the aggression in individuals with intermittent explosive disorder is limited to impulsive aggression and is not premeditated, and it is not committed in order to achieve some tangible objective (e.g., money, power, intimidation). Also, the definition of intermittent explosive disorder does not include the non-aggressive symptoms of conduct disorder. If criteria for both disorders are met, the diagnosis of intermittent explosive disorder should be given only when the recurrent impulsive aggressive outbursts warrant independent clinical attention.

**Adjustment disorders.** The diagnosis of an adjustment disorder (with disturbance of conduct or with mixed disturbance of emotions and conduct) should be considered if clinically significant conduct problems that do not meet the criteria for another specific disorder develop in clear association with the onset of a psychosocial stressor and do not resolve within 6 months of the termination of the stressor (or its consequences). Conduct disorder is diagnosed only when the conduct problems represent a repetitive and persistent pattern that is associated with impairment in social, academic, or occupational functioning.

## Comorbidity

ADHD and oppositional defiant disorder are both common in individuals with conduct disorder, and this comorbid presentation predicts worse outcomes. Individuals who show the personality features associated with antisocial personality disorder often violate the basic rights of others or violate major age-appropriate societal norms, and as a result their pattern of behavior often meets criteria for conduct disorder. Conduct disorder may also co-occur with one or more of the following mental disorders: specific learning disorder, anxiety disorders, depressive or bipolar disorders, and substance-related disorders. Academic achievement, particularly in reading and other verbal skills, is often below the level expected on the basis of age and intelligence and may justify the additional diagnosis of specific learning disorder or a communication disorder.



disorder, it is usually secondary to repeated interpersonal failures due to angry outbursts and frequent mood shifts, rather than a result of a persistent lack of social contacts and desire for intimacy. Furthermore, individuals with schizotypal personality disorder do not usually demonstrate the impulsive or manipulative behaviors of the individual with borderline personality disorder. However, there is a high rate of co-occurrence between the two disorders, so that making such distinctions is not always feasible. Schizotypal features during adolescence may be reflective of transient emotional turmoil, rather than an enduring personality disorder.

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# Cluster B Personality Disorders

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## Antisocial Personality Disorder

### Diagnostic Criteria

301.7 (F60.2)

- A. A pervasive pattern of disregard for and violation of the rights of others, occurring since age 15 years, as indicated by three (or more) of the following:
    - 1. Failure to conform to social norms with respect to lawful behaviors, as indicated by repeatedly performing acts that are grounds for arrest.
    - 2. Deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or pleasure.
    - 3. Impulsivity or failure to plan ahead.
    - 4. Irritability and aggressiveness, as indicated by repeated physical fights or assaults.
    - 5. Reckless disregard for safety of self or others.
    - 6. Consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial obligations.
    - 7. Lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another.
  - B. The individual is at least age 18 years.
  - C. There is evidence of conduct disorder with onset before age 15 years.
  - D. The occurrence of antisocial behavior is not exclusively during the course of schizophrenia or bipolar disorder.
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### Diagnostic Features

The essential feature of antisocial personality disorder is a pervasive pattern of disregard for, and violation of, the rights of others that begins in childhood or early adolescence and continues into adulthood. This pattern has also been referred to as *psychopathy*, *sociopathy*, or *dyssocial personality disorder*. Because deceit and manipulation are central features of antisocial personality disorder, it may be especially helpful to integrate information acquired from systematic clinical assessment with information collected from collateral sources.

For this diagnosis to be given, the individual must be at least age 18 years (Criterion B) and must have had a history of some symptoms of conduct disorder before age 15 years (Criterion C). Conduct disorder involves a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated. The specific behaviors characteristic of conduct disorder fall into one of four categories: aggression to people and animals, destruction of property, deceitfulness or theft, or serious violation of rules.

The pattern of antisocial behavior continues into adulthood. Individuals with antisocial personality disorder fail to conform to social norms with respect to lawful behavior (Criterion A1). They may repeatedly perform acts that are grounds for arrest (whether they are arrested or not), such as destroying property, harassing others, stealing, or pursuing illegal occupations. Persons with this disorder disregard the wishes, rights, or feelings of others. They are frequently deceitful and manipulative in order to gain personal profit or pleasure (e.g., to obtain money, sex, or power) (Criterion A2). They may repeatedly lie, use an alias, con others, or malingering. A pattern of impulsivity may be manifested by a failure to plan ahead (Criterion A3). Decisions are made on the spur of the moment, without forethought and without consideration for the consequences to self or others; this may lead to sudden changes of jobs, residences, or relationships. Individuals with antisocial personality disorder tend to be irritable and aggressive and may repeatedly get into physical fights or commit acts of physical assault (including spouse beating or child beating) (Criterion A4). (Aggressive acts that are required to defend oneself or someone else are not considered to be evidence for this item.) These individuals also display a reckless disregard for the safety of themselves or others (Criterion A5). This may be evidenced in their driving behavior (i.e., recurrent speeding, driving while intoxicated, multiple accidents). They may engage in sexual behavior or substance use that has a high risk for harmful consequences. They may neglect or fail to care for a child in a way that puts the child in danger.

Individuals with antisocial personality disorder also tend to be consistently and extremely irresponsible (Criterion A6). Irresponsible work behavior may be indicated by significant periods of unemployment despite available job opportunities, or by abandonment of several jobs without a realistic plan for getting another job. There may also be a pattern of repeated absences from work that are not explained by illness either in themselves or in their family. Financial irresponsibility is indicated by acts such as defaulting on debts, failing to provide child support, or failing to support other dependents on a regular basis. Individuals with antisocial personality disorder show little remorse for the consequences of their acts (Criterion A7). They may be indifferent to, or provide a superficial rationalization for, having hurt, mistreated, or stolen from someone (e.g., "life's unfair," "losers deserve to lose"). These individuals may blame the victims for being foolish, helpless, or deserving their fate (e.g., "he had it coming anyway"); they may minimize the harmful consequences of their actions; or they may simply indicate complete indifference. They generally fail to compensate or make amends for their behavior. They may believe that everyone is out to "help number one" and that one should stop at nothing to avoid being pushed around.

The antisocial behavior must not occur exclusively during the course of schizophrenia or bipolar disorder (Criterion D).

## **Associated Features Supporting Diagnosis**

Individuals with antisocial personality disorder frequently lack empathy and tend to be callous, cynical, and contemptuous of the feelings, rights, and sufferings of others. They may have an inflated and arrogant self-appraisal (e.g., feel that ordinary work is beneath them or lack a realistic concern about their current problems or their future) and may be excessively opinionated, self-assured, or cocky. They may display a glib, superficial charm and can be quite voluble and verbally facile (e.g., using technical terms or jargon that might impress someone who is unfamiliar with the topic). Lack of empathy, inflated self-appraisal, and superficial charm are features that have been commonly included in traditional conceptions of psychopathy that may be particularly distinguishing of the disorder and more predictive of recidivism in prison or forensic settings, where criminal, delinquent, or aggressive acts are likely to be nonspecific. These individuals may also be irresponsible and exploitative in their sexual relationships. They may have a history of many

sexual partners and may never have sustained a monogamous relationship. They may be irresponsible as parents, as evidenced by malnutrition of a child, an illness in the child resulting from a lack of minimal hygiene, a child's dependence on neighbors or nonresident relatives for food or shelter, a failure to arrange for a caretaker for a young child when the individual is away from home, or repeated squandering of money required for household necessities. These individuals may receive dishonorable discharges from the armed services, may fail to be self-supporting, may become impoverished or even homeless, or may spend many years in penal institutions. Individuals with antisocial personality disorder are more likely than people in the general population to die prematurely by violent means (e.g., suicide, accidents, homicides).

Individuals with antisocial personality disorder may also experience dysphoria, including complaints of tension, inability to tolerate boredom, and depressed mood. They may have associated anxiety disorders, depressive disorders, substance use disorders, somatic symptom disorder, gambling disorder, and other disorders of impulse control. Individuals with antisocial personality disorder also often have personality features that meet criteria for other personality disorders, particularly borderline, histrionic, and narcissistic personality disorders. The likelihood of developing antisocial personality disorder in adult life is increased if the individual experienced childhood onset of conduct disorder (before age 10 years) and accompanying attention-deficit/hyperactivity disorder. Child abuse or neglect, unstable or erratic parenting, or inconsistent parental discipline may increase the likelihood that conduct disorder will evolve into antisocial personality disorder.

## Prevalence

Twelve-month prevalence rates of antisocial personality disorder, using criteria from previous DSMs, are between 0.2% and 3.3%. The highest prevalence of antisocial personality disorder (greater than 70%) is among most severe samples of males with alcohol use disorder and from substance abuse clinics, prisons, or other forensic settings. Prevalence is higher in samples affected by adverse socioeconomic (i.e., poverty) or sociocultural (i.e., migration) factors.

## Development and Course

Antisocial personality disorder has a chronic course but may become less evident or remit as the individual grows older, particularly by the fourth decade of life. Although this remission tends to be particularly evident with respect to engaging in criminal behavior, there is likely to be a decrease in the full spectrum of antisocial behaviors and substance use. By definition, antisocial personality cannot be diagnosed before age 18 years.

## Risk and Prognostic Factors

**Genetic and physiological.** Antisocial personality disorder is more common among the first-degree biological relatives of those with the disorder than in the general population. The risk to biological relatives of females with the disorder tends to be higher than the risk to biological relatives of males with the disorder. Biological relatives of individuals with this disorder are also at increased risk for somatic symptom disorder and substance use disorders. Within a family that has a member with antisocial personality disorder, males more often have antisocial personality disorder and substance use disorders, whereas females more often have somatic symptom disorder. However, in such families, there is an increase in prevalence of all of these disorders in both males and females compared with the general population. Adoption studies indicate that both genetic and environmental factors contribute to the risk of developing antisocial personality disorder. Both adopted and biological children of parents with antisocial personality disorder have an increased

risk of developing antisocial personality disorder, somatic symptom disorder, and substance use disorders. Adopted-away children resemble their biological parents more than their adoptive parents, but the adoptive family environment influences the risk of developing a personality disorder and related psychopathology.

## Culture-Related Diagnostic Issues

Antisocial personality disorder appears to be associated with low socioeconomic status and urban settings. Concerns have been raised that the diagnosis may at times be misapplied to individuals in settings in which seemingly antisocial behavior may be part of a protective survival strategy. In assessing antisocial traits, it is helpful for the clinician to consider the social and economic context in which the behaviors occur.

## Gender-Related Diagnostic Issues

Antisocial personality disorder is much more common in males than in females. There has been some concern that antisocial personality disorder may be underdiagnosed in females, particularly because of the emphasis on aggressive items in the definition of conduct disorder.

## Differential Diagnosis

The diagnosis of antisocial personality disorder is not given to individuals younger than 18 years and is given only if there is a history of some symptoms of conduct disorder before age 15 years. For individuals older than 18 years, a diagnosis of conduct disorder is given only if the criteria for antisocial personality disorder are not met.

**Substance use disorders.** When antisocial behavior in an adult is associated with a substance use disorder, the diagnosis of antisocial personality disorder is not made unless the signs of antisocial personality disorder were also present in childhood and have continued into adulthood. When substance use and antisocial behavior both began in childhood and continued into adulthood, both a substance use disorder and antisocial personality disorder should be diagnosed if the criteria for both are met, even though some antisocial acts may be a consequence of the substance use disorder (e.g., illegal selling of drugs, thefts to obtain money for drugs).

**Schizophrenia and bipolar disorders.** Antisocial behavior that occurs exclusively during the course of schizophrenia or a bipolar disorder should not be diagnosed as antisocial personality disorder.

**Other personality disorders.** Other personality disorders may be confused with antisocial personality disorder because they have certain features in common. It is therefore important to distinguish among these disorders based on differences in their characteristic features. However, if an individual has personality features that meet criteria for one or more personality disorders in addition to antisocial personality disorder, all can be diagnosed. Individuals with antisocial personality disorder and narcissistic personality disorder share a tendency to be tough-minded, glib, superficial, exploitative, and lack empathy. However, narcissistic personality disorder does not include characteristics of impulsivity, aggression, and deceit. In addition, individuals with antisocial personality disorder may not be as needy of the admiration and envy of others, and persons with narcissistic personality disorder usually lack the history of conduct disorder in childhood or criminal behavior in adulthood. Individuals with antisocial personality disorder and histrionic personality disorder share a tendency to be impulsive, superficial, excitement seeking, reckless, seductive, and manipulative, but persons with histrionic personality disorder tend to be more exaggerated in their emotions and do not characteristically engage in antisocial behaviors. Individuals with histrionic and borderline personality disorders are

manipulative to gain nurturance, whereas those with antisocial personality disorder are manipulative to gain profit, power, or some other material gratification. Individuals with antisocial personality disorder tend to be less emotionally unstable and more aggressive than those with borderline personality disorder. Although antisocial behavior may be present in some individuals with paranoid personality disorder, it is not usually motivated by a desire for personal gain or to exploit others as in antisocial personality disorder, but rather is more often attributable to a desire for revenge.

**Criminal behavior not associated with a personality disorder.** Antisocial personality disorder must be distinguished from criminal behavior undertaken for gain that is not accompanied by the personality features characteristic of this disorder. Only when antisocial personality traits are inflexible, maladaptive, and persistent and cause significant functional impairment or subjective distress do they constitute antisocial personality disorder.

## Borderline Personality Disorder

### Diagnostic Criteria

**301.83 (F60.3)**

A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity, beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:

1. Frantic efforts to avoid real or imagined abandonment. (**Note:** Do not include suicidal or self-mutilating behavior covered in Criterion 5.)
2. A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation.
3. Identity disturbance: markedly and persistently unstable self-image or sense of self.
4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). (**Note:** Do not include suicidal or self-mutilating behavior covered in Criterion 5.)
5. Recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior.
6. Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
7. Chronic feelings of emptiness.
8. Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).
9. Transient, stress-related paranoid ideation or severe dissociative symptoms.

### Diagnostic Features

The essential feature of borderline personality disorder is a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity that begins by early adulthood and is present in a variety of contexts.

Individuals with borderline personality disorder make frantic efforts to avoid real or imagined abandonment (Criterion 1). The perception of impending separation or rejection, or the loss of external structure, can lead to profound changes in self-image, affect, cognition, and behavior. These individuals are very sensitive to environmental circumstances. They experience intense abandonment fears and inappropriate anger even when faced with a realistic time-limited separation or when there are unavoidable changes in plans (e.g., sudden despair in reaction to a clinician's announcing the end of the hour; panic or fury when someone important to them is just a few minutes late or must cancel an appointment). They may believe that this "abandonment" implies they are "bad." These abandonment fears are related to an intolerance of being alone and a need to have other people with them. Their frantic

efforts to avoid abandonment may include impulsive actions such as self-mutilating or suicidal behaviors, which are described separately in Criterion 5.

Individuals with borderline personality disorder have a pattern of unstable and intense relationships (Criterion 2). They may idealize potential caregivers or lovers at the first or second meeting, demand to spend a lot of time together, and share the most intimate details early in a relationship. However, they may switch quickly from idealizing other people to devaluing them, feeling that the other person does not care enough, does not give enough, or is not “there” enough. These individuals can empathize with and nurture other people, but only with the expectation that the other person will “be there” in return to meet their own needs on demand. These individuals are prone to sudden and dramatic shifts in their view of others, who may alternatively be seen as beneficent supports or as cruelly punitive. Such shifts often reflect disillusionment with a caregiver whose nurturing qualities had been idealized or whose rejection or abandonment is expected.

There may be an identity disturbance characterized by markedly and persistently unstable self-image or sense of self (Criterion 3). There are sudden and dramatic shifts in self-image, characterized by shifting goals, values, and vocational aspirations. There may be sudden changes in opinions and plans about career, sexual identity, values, and types of friends. These individuals may suddenly change from the role of a needy supplicant for help to that of a righteous avenger of past mistreatment. Although they usually have a self-image that is based on being bad or evil, individuals with this disorder may at times have feelings that they do not exist at all. Such experiences usually occur in situations in which the individual feels a lack of a meaningful relationship, nurturing, and support. These individuals may show worse performance in unstructured work or school situations.

Individuals with borderline personality disorder display impulsivity in at least two areas that are potentially self-damaging (Criterion 4). They may gamble, spend money irresponsibly, binge eat, abuse substances, engage in unsafe sex, or drive recklessly. Individuals with this disorder display recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior (Criterion 5). Completed suicide occurs in 8%–10% of such individuals, and self-mutilative acts (e.g., cutting or burning) and suicide threats and attempts are very common. Recurrent suicidality is often the reason that these individuals present for help. These self-destructive acts are usually precipitated by threats of separation or rejection or by expectations that the individual assumes increased responsibility. Self-mutilation may occur during dissociative experiences and often brings relief by reaffirming the ability to feel or by expiating the individual’s sense of being evil.

Individuals with borderline personality disorder may display affective instability that is due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days) (Criterion 6). The basic dysphoric mood of those with borderline personality disorder is often disrupted by periods of anger, panic, or despair and is rarely relieved by periods of well-being or satisfaction. These episodes may reflect the individual’s extreme reactivity to interpersonal stresses. Individuals with borderline personality disorder may be troubled by chronic feelings of emptiness (Criterion 7). Easily bored, they may constantly seek something to do. Individuals with this disorder frequently express inappropriate, intense anger or have difficulty controlling their anger (Criterion 8). They may display extreme sarcasm, enduring bitterness, or verbal outbursts. The anger is often elicited when a caregiver or lover is seen as neglectful, withholding, uncaring, or abandoning. Such expressions of anger are often followed by shame and guilt and contribute to the feeling they have of being evil. During periods of extreme stress, transient paranoid ideation or dissociative symptoms (e.g., depersonalization) may occur (Criterion 9), but these are generally of insufficient severity or duration to warrant an additional diagnosis. These episodes occur most frequently in response to a real or imagined abandonment. Symptoms tend to be transient, lasting minutes or hours. The real or perceived return of the caregiver’s nurturance may result in a remission of symptoms.

## Associated Features Supporting Diagnosis

Individuals with borderline personality disorder may have a pattern of undermining themselves at the moment a goal is about to be realized (e.g., dropping out of school just before graduation; regressing severely after a discussion of how well therapy is going; destroying a good relationship just when it is clear that the relationship could last). Some individuals develop psychotic-like symptoms (e.g., hallucinations, body-image distortions, ideas of reference, hypnagogic phenomena) during times of stress. Individuals with this disorder may feel more secure with transitional objects (i.e., a pet or inanimate possession) than in interpersonal relationships. Premature death from suicide may occur in individuals with this disorder, especially in those with co-occurring depressive disorders or substance use disorders. Physical handicaps may result from self-inflicted abuse behaviors or failed suicide attempts. Recurrent job losses, interrupted education, and separation or divorce are common. Physical and sexual abuse, neglect, hostile conflict, and early parental loss are more common in the childhood histories of those with borderline personality disorder. Common co-occurring disorders include depressive and bipolar disorders, substance use disorders, eating disorders (notably bulimia nervosa), posttraumatic stress disorder, and attention-deficit/hyperactivity disorder. Borderline personality disorder also frequently co-occurs with the other personality disorders.

## Prevalence

The median population prevalence of borderline personality disorder is estimated to be 1.6% but may be as high as 5.9%. The prevalence of borderline personality disorder is about 6% in primary care settings, about 10% among individuals seen in outpatient mental health clinics, and about 20% among psychiatric inpatients. The prevalence of borderline personality disorder may decrease in older age groups.

## Development and Course

There is considerable variability in the course of borderline personality disorder. The most common pattern is one of chronic instability in early adulthood, with episodes of serious affective and impulsive dyscontrol and high levels of use of health and mental health resources. The impairment from the disorder and the risk of suicide are greatest in the young-adult years and gradually wane with advancing age. Although the tendency toward intense emotions, impulsivity, and intensity in relationships is often lifelong, individuals who engage in therapeutic intervention often show improvement beginning sometime during the first year. During their 30s and 40s, the majority of individuals with this disorder attain greater stability in their relationships and vocational functioning. Follow-up studies of individuals identified through outpatient mental health clinics indicate that after about 10 years, as many as half of the individuals no longer have a pattern of behavior that meets full criteria for borderline personality disorder.

## Risk and Prognostic Factors

**Genetic and physiological.** Borderline personality disorder is about five times more common among first-degree biological relatives of those with the disorder than in the general population. There is also an increased familial risk for substance use disorders, antisocial personality disorder, and depressive or bipolar disorders.

## Culture-Related Diagnostic Issues

The pattern of behavior seen in borderline personality disorder has been identified in many settings around the world. Adolescents and young adults with identity problems (especially when accompanied by substance use) may transiently display behaviors that misleadingly

give the impression of borderline personality disorder. Such situations are characterized by emotional instability, “existential” dilemmas, uncertainty, anxiety-provoking choices, conflicts about sexual orientation, and competing social pressures to decide on careers.

## Gender-Related Diagnostic Issues

Borderline personality disorder is diagnosed predominantly (about 75%) in females.

## Differential Diagnosis

**Depressive and bipolar disorders.** Borderline personality disorder often co-occurs with depressive or bipolar disorders, and when criteria for both are met, both may be diagnosed. Because the cross-sectional presentation of borderline personality disorder can be mimicked by an episode of depressive or bipolar disorder, the clinician should avoid giving an additional diagnosis of borderline personality disorder based only on cross-sectional presentation without having documented that the pattern of behavior had an early onset and a long-standing course.

**Other personality disorders.** Other personality disorders may be confused with borderline personality disorder because they have certain features in common. It is therefore important to distinguish among these disorders based on differences in their characteristic features. However, if an individual has personality features that meet criteria for one or more personality disorders in addition to borderline personality disorder, all can be diagnosed. Although histrionic personality disorder can also be characterized by attention seeking, manipulative behavior, and rapidly shifting emotions, borderline personality disorder is distinguished by self-destructiveness, angry disruptions in close relationships, and chronic feelings of deep emptiness and loneliness. Paranoid ideas or illusions may be present in both borderline personality disorder and schizotypal personality disorder, but these symptoms are more transient, interpersonally reactive, and responsive to external structuring in borderline personality disorder. Although paranoid personality disorder and narcissistic personality disorder may also be characterized by an angry reaction to minor stimuli, the relative stability of self-image, as well as the relative lack of self-destructiveness, impulsivity, and abandonment concerns, distinguishes these disorders from borderline personality disorder. Although antisocial personality disorder and borderline personality disorder are both characterized by manipulative behavior, individuals with antisocial personality disorder are manipulative to gain profit, power, or some other material gratification, whereas the goal in borderline personality disorder is directed more toward gaining the concern of caretakers. Both dependent personality disorder and borderline personality disorder are characterized by fear of abandonment; however, the individual with borderline personality disorder reacts to abandonment with feelings of emotional emptiness, rage, and demands, whereas the individual with dependent personality disorder reacts with increasing appeasement and submissiveness and urgently seeks a replacement relationship to provide caregiving and support. Borderline personality disorder can further be distinguished from dependent personality disorder by the typical pattern of unstable and intense relationships.

**Personality change due to another medical condition.** Borderline personality disorder must be distinguished from personality change due to another medical condition, in which the traits that emerge are attributable to the effects of another medical condition on the central nervous system.

**Substance use disorders.** Borderline personality disorder must also be distinguished from symptoms that may develop in association with persistent substance use.

**Identity problems.** Borderline personality disorder should be distinguished from an identity problem, which is reserved for identity concerns related to a developmental phase (e.g., adolescence) and does not qualify as a mental disorder.



## Differential Diagnosis

**Other personality disorders and personality traits.** Other personality disorders may be confused with histrionic personality disorder because they have certain features in common. It is therefore important to distinguish among these disorders based on differences in their characteristic features. However, if an individual has personality features that meet criteria for one or more personality disorders in addition to histrionic personality disorder, all can be diagnosed. Although borderline personality disorder can also be characterized by attention seeking, manipulative behavior, and rapidly shifting emotions, it is distinguished by self-destructiveness, angry disruptions in close relationships, and chronic feelings of deep emptiness and identity disturbance. Individuals with antisocial personality disorder and histrionic personality disorder share a tendency to be impulsive, superficial, excitement seeking, reckless, seductive, and manipulative, but persons with histrionic personality disorder tend to be more exaggerated in their emotions and do not characteristically engage in antisocial behaviors. Individuals with histrionic personality disorder are manipulative to gain nurturance, whereas those with antisocial personality disorder are manipulative to gain profit, power, or some other material gratification. Although individuals with narcissistic personality disorder also crave attention from others, they usually want praise for their “superiority,” whereas individuals with histrionic personality disorder are willing to be viewed as fragile or dependent if this is instrumental in getting attention. Individuals with narcissistic personality disorder may exaggerate the intimacy of their relationships with other people, but they are more apt to emphasize the “VIP” status or wealth of their friends. In dependent personality disorder, the individual is excessively dependent on others for praise and guidance, but is without the flamboyant, exaggerated, emotional features of individuals with histrionic personality disorder.

Many individuals may display histrionic personality traits. Only when these traits are inflexible, maladaptive, and persisting and cause significant functional impairment or subjective distress do they constitute histrionic personality disorder.

**Personality change due to another medical condition.** Histrionic personality disorder must be distinguished from personality change due to another medical condition, in which the traits that emerge are attributable to the effects of another medical condition on the central nervous system.

**Substance use disorders.** The disorder must also be distinguished from symptoms that may develop in association with persistent substance use.

## Narcissistic Personality Disorder

### Diagnostic Criteria

**301.81 (F60.81)**

A pervasive pattern of grandiosity (in fantasy or behavior), need for admiration, and lack of empathy, beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:

1. Has a grandiose sense of self-importance (e.g., exaggerates achievements and talents, expects to be recognized as superior without commensurate achievements).
2. Is preoccupied with fantasies of unlimited success, power, brilliance, beauty, or ideal love.
3. Believes that he or she is “special” and unique and can only be understood by, or should associate with, other special or high-status people (or institutions).
4. Requires excessive admiration.
5. Has a sense of entitlement (i.e., unreasonable expectations of especially favorable treatment or automatic compliance with his or her expectations).

6. Is interpersonally exploitative (i.e., takes advantage of others to achieve his or her own ends).
  7. Lacks empathy: is unwilling to recognize or identify with the feelings and needs of others.
  8. Is often envious of others or believes that others are envious of him or her.
  9. Shows arrogant, haughty behaviors or attitudes.
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## Diagnostic Features

The essential feature of narcissistic personality disorder is a pervasive pattern of grandiosity, need for admiration, and lack of empathy that begins by early adulthood and is present in a variety of contexts.

Individuals with this disorder have a grandiose sense of self-importance (Criterion 1). They routinely overestimate their abilities and inflate their accomplishments, often appearing boastful and pretentious. They may blithely assume that others attribute the same value to their efforts and may be surprised when the praise they expect and feel they deserve is not forthcoming. Often implicit in the inflated judgments of their own accomplishments is an underestimation (devaluation) of the contributions of others. Individuals with narcissistic personality disorder are often preoccupied with fantasies of unlimited success, power, brilliance, beauty, or ideal love (Criterion 2). They may ruminate about “long overdue” admiration and privilege and compare themselves favorably with famous or privileged people.

Individuals with narcissistic personality disorder believe that they are superior, special, or unique and expect others to recognize them as such (Criterion 3). They may feel that they can only be understood by, and should only associate with, other people who are special or of high status and may attribute “unique,” “perfect,” or “gifted” qualities to those with whom they associate. Individuals with this disorder believe that their needs are special and beyond the ken of ordinary people. Their own self-esteem is enhanced (i.e., “mirrored”) by the idealized value that they assign to those with whom they associate. They are likely to insist on having only the “top” person (doctor, lawyer, hairdresser, instructor) or being affiliated with the “best” institutions but may devalue the credentials of those who disappoint them.

Individuals with this disorder generally require excessive admiration (Criterion 4). Their self-esteem is almost invariably very fragile. They may be preoccupied with how well they are doing and how favorably they are regarded by others. This often takes the form of a need for constant attention and admiration. They may expect their arrival to be greeted with great fanfare and are astonished if others do not covet their possessions. They may constantly fish for compliments, often with great charm. A sense of entitlement is evident in these individuals’ unreasonable expectation of especially favorable treatment (Criterion 5). They expect to be catered to and are puzzled or furious when this does not happen. For example, they may assume that they do not have to wait in line and that their priorities are so important that others should defer to them, and then get irritated when others fail to assist “in their very important work.” This sense of entitlement, combined with a lack of sensitivity to the wants and needs of others, may result in the conscious or unwitting exploitation of others (Criterion 6). They expect to be given whatever they want or feel they need, no matter what it might mean to others. For example, these individuals may expect great dedication from others and may overwork them without regard for the impact on their lives. They tend to form friendships or romantic relationships only if the other person seems likely to advance their purposes or otherwise enhance their self-esteem. They often usurp special privileges and extra resources that they believe they deserve because they are so special.

Individuals with narcissistic personality disorder generally have a lack of empathy and have difficulty recognizing the desires, subjective experiences, and feelings of others (Criterion 7). They may assume that others are totally concerned about their welfare. They tend to discuss their own concerns in inappropriate and lengthy detail, while failing to recognize that others also have feelings and needs. They are often contemptuous and impatient with

others who talk about their own problems and concerns. These individuals may be oblivious to the hurt their remarks may inflict (e.g., exuberantly telling a former lover that “I am now in the relationship of a lifetime!”; boasting of health in front of someone who is sick). When recognized, the needs, desires, or feelings of others are likely to be viewed disparagingly as signs of weakness or vulnerability. Those who relate to individuals with narcissistic personality disorder typically find an emotional coldness and lack of reciprocal interest.

These individuals are often envious of others or believe that others are envious of them (Criterion 8). They may begrudge others their successes or possessions, feeling that they better deserve those achievements, admiration, or privileges. They may harshly devalue the contributions of others, particularly when those individuals have received acknowledgment or praise for their accomplishments. Arrogant, haughty behaviors characterize these individuals; they often display snobbish, disdainful, or patronizing attitudes (Criterion 9). For example, an individual with this disorder may complain about a clumsy waiter’s “rudeness” or “stupidity” or conclude a medical evaluation with a condescending evaluation of the physician.

## **Associated Features Supporting Diagnosis**

Vulnerability in self-esteem makes individuals with narcissistic personality disorder very sensitive to “injury” from criticism or defeat. Although they may not show it outwardly, criticism may haunt these individuals and may leave them feeling humiliated, degraded, hollow, and empty. They may react with disdain, rage, or defiant counterattack. Such experiences often lead to social withdrawal or an appearance of humility that may mask and protect the grandiosity. Interpersonal relations are typically impaired because of problems derived from entitlement, the need for admiration, and the relative disregard for the sensitivities of others. Though overweening ambition and confidence may lead to high achievement, performance may be disrupted because of intolerance of criticism or defeat. Sometimes vocational functioning can be very low, reflecting an unwillingness to take a risk in competitive or other situations in which defeat is possible. Sustained feelings of shame or humiliation and the attendant self-criticism may be associated with social withdrawal, depressed mood, and persistent depressive disorder (dysthymia) or major depressive disorder. In contrast, sustained periods of grandiosity may be associated with a hypomanic mood. Narcissistic personality disorder is also associated with anorexia nervosa and substance use disorders (especially related to cocaine). Histrionic, borderline, antisocial, and paranoid personality disorders may be associated with narcissistic personality disorder.

## **Prevalence**

Prevalence estimates for narcissistic personality disorder, based on DSM-IV definitions, range from 0% to 6.2% in community samples.

## **Development and Course**

Narcissistic traits may be particularly common in adolescents and do not necessarily indicate that the individual will go on to have narcissistic personality disorder. Individuals with narcissistic personality disorder may have special difficulties adjusting to the onset of physical and occupational limitations that are inherent in the aging process.

## **Gender-Related Diagnostic Issues**

Of those diagnosed with narcissistic personality disorder, 50%–75% are male.

## **Differential Diagnosis**

**Other personality disorders and personality traits.** Other personality disorders may be confused with narcissistic personality disorder because they have certain features in

common. It is, therefore, important to distinguish among these disorders based on differences in their characteristic features. However, if an individual has personality features that meet criteria for one or more personality disorders in addition to narcissistic personality disorder, all can be diagnosed. The most useful feature in discriminating narcissistic personality disorder from histrionic, antisocial, and borderline personality disorders, in which the interactive styles are coquettish, callous, and needy, respectively, is the grandiosity characteristic of narcissistic personality disorder. The relative stability of self-image as well as the relative lack of self-destructiveness, impulsivity, and abandonment concerns also help distinguish narcissistic personality disorder from borderline personality disorder. Excessive pride in achievements, a relative lack of emotional display, and disdain for others' sensitivities help distinguish narcissistic personality disorder from histrionic personality disorder. Although individuals with borderline, histrionic, and narcissistic personality disorders may require much attention, those with narcissistic personality disorder specifically need that attention to be admiring. Individuals with antisocial and narcissistic personality disorders share a tendency to be tough-minded, glib, superficial, exploitative, and unempathic. However, narcissistic personality disorder does not necessarily include characteristics of impulsivity, aggression, and deceit. In addition, individuals with antisocial personality disorder may not be as needy of the admiration and envy of others, and persons with narcissistic personality disorder usually lack the history of conduct disorder in childhood or criminal behavior in adulthood. In both narcissistic personality disorder and obsessive-compulsive personality disorder, the individual may profess a commitment to perfectionism and believe that others cannot do things as well. In contrast to the accompanying self-criticism of those with obsessive-compulsive personality disorder, individuals with narcissistic personality disorder are more likely to believe that they have achieved perfection. Suspiciousness and social withdrawal usually distinguish those with schizotypal or paranoid personality disorder from those with narcissistic personality disorder. When these qualities are present in individuals with narcissistic personality disorder, they derive primarily from fears of having imperfections or flaws revealed.

Many highly successful individuals display personality traits that might be considered narcissistic. Only when these traits are inflexible, maladaptive, and persisting and cause significant functional impairment or subjective distress do they constitute narcissistic personality disorder.

**Mania or hypomania.** Grandiosity may emerge as part of manic or hypomanic episodes, but the association with mood change or functional impairments helps distinguish these episodes from narcissistic personality disorder.

**Substance use disorders.** Narcissistic personality disorder must also be distinguished from symptoms that may develop in association with persistent substance use.

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## Cluster C Personality Disorders

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### Avoidant Personality Disorder

#### Diagnostic Criteria

**301.82 (F60.6)**

A pervasive pattern of social inhibition, feelings of inadequacy, and hypersensitivity to negative evaluation, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:

1. Avoids occupational activities that involve significant interpersonal contact because of fears of criticism, disapproval, or rejection.

**Other personality disorders and personality traits.** Other personality disorders may be confused with dependent personality disorder because they have certain features in common. It is therefore important to distinguish among these disorders based on differences in their characteristic features. However, if an individual has personality features that meet criteria for one or more personality disorders in addition to dependent personality disorder, all can be diagnosed. Although many personality disorders are characterized by dependent features, dependent personality disorder can be distinguished by its predominantly submissive, reactive, and clinging behavior. Both dependent personality disorder and borderline personality disorder are characterized by fear of abandonment; however, the individual with borderline personality disorder reacts to abandonment with feelings of emotional emptiness, rage, and demands, whereas the individual with dependent personality disorder reacts with increasing appeasement and submissiveness and urgently seeks a replacement relationship to provide caregiving and support. Borderline personality disorder can further be distinguished from dependent personality disorder by a typical pattern of unstable and intense relationships. Individuals with histrionic personality disorder, like those with dependent personality disorder, have a strong need for reassurance and approval and may appear childlike and clinging. However, unlike dependent personality disorder, which is characterized by self-effacing and docile behavior, histrionic personality disorder is characterized by gregarious flamboyance with active demands for attention. Both dependent personality disorder and avoidant personality disorder are characterized by feelings of inadequacy, hypersensitivity to criticism, and a need for reassurance; however, individuals with avoidant personality disorder have such a strong fear of humiliation and rejection that they withdraw until they are certain they will be accepted. In contrast, individuals with dependent personality disorder have a pattern of seeking and maintaining connections to important others, rather than avoiding and withdrawing from relationships.

Many individuals display dependent personality traits. Only when these traits are inflexible, maladaptive, and persisting and cause significant functional impairment or subjective distress do they constitute dependent personality disorder.

**Personality change due to another medical condition.** Dependent personality disorder must be distinguished from personality change due to another medical condition, in which the traits that emerge are attributable to the effects of another medical condition on the central nervous system.

**Substance use disorders.** Dependent personality disorder must also be distinguished from symptoms that may develop in association with persistent substance use.

## Obsessive-Compulsive Personality Disorder

### Diagnostic Criteria

**301.4 (F60.5)**

A pervasive pattern of preoccupation with orderliness, perfectionism, and mental and interpersonal control, at the expense of flexibility, openness, and efficiency, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:

1. Is preoccupied with details, rules, lists, order, organization, or schedules to the extent that the major point of the activity is lost.
2. Shows perfectionism that interferes with task completion (e.g., is unable to complete a project because his or her own overly strict standards are not met).
3. Is excessively devoted to work and productivity to the exclusion of leisure activities and friendships (not accounted for by obvious economic necessity).
4. Is overconscientious, scrupulous, and inflexible about matters of morality, ethics, or values (not accounted for by cultural or religious identification).

5. Is unable to discard worn-out or worthless objects even when they have no sentimental value.
  6. Is reluctant to delegate tasks or to work with others unless they submit to exactly his or her way of doing things.
  7. Adopts a miserly spending style toward both self and others; money is viewed as something to be hoarded for future catastrophes.
  8. Shows rigidity and stubbornness.
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## Diagnostic Features

The essential feature of obsessive-compulsive personality disorder is a preoccupation with orderliness, perfectionism, and mental and interpersonal control, at the expense of flexibility, openness, and efficiency. This pattern begins by early adulthood and is present in a variety of contexts.

Individuals with obsessive-compulsive personality disorder attempt to maintain a sense of control through painstaking attention to rules, trivial details, procedures, lists, schedules, or form to the extent that the major point of the activity is lost (Criterion 1). They are excessively careful and prone to repetition, paying extraordinary attention to detail and repeatedly checking for possible mistakes. They are oblivious to the fact that other people tend to become very annoyed at the delays and inconveniences that result from this behavior. For example, when such individuals misplace a list of things to be done, they will spend an inordinate amount of time looking for the list rather than spending a few moments re-creating it from memory and proceeding to accomplish the tasks. Time is poorly allocated, and the most important tasks are left to the last moment. The perfectionism and self-imposed high standards of performance cause significant dysfunction and distress in these individuals. They may become so involved in making every detail of a project absolutely perfect that the project is never finished (Criterion 2). For example, the completion of a written report is delayed by numerous time-consuming rewrites that all come up short of "perfection." Deadlines are missed, and aspects of the individual's life that are not the current focus of activity may fall into disarray.

Individuals with obsessive-compulsive personality disorder display excessive devotion to work and productivity to the exclusion of leisure activities and friendships (Criterion 3). This behavior is not accounted for by economic necessity. They often feel that they do not have time to take an evening or a weekend day off to go on an outing or to just relax. They may keep postponing a pleasurable activity, such as a vacation, so that it may never occur. When they do take time for leisure activities or vacations, they are very uncomfortable unless they have taken along something to work on so they do not "waste time." There may be a great concentration on household chores (e.g., repeated excessive cleaning so that "one could eat off the floor"). If they spend time with friends, it is likely to be in some kind of formally organized activity (e.g., sports). Hobbies or recreational activities are approached as serious tasks requiring careful organization and hard work to master. The emphasis is on perfect performance. These individuals turn play into a structured task (e.g., correcting an infant for not putting rings on the post in the right order; telling a toddler to ride his or her tricycle in a straight line; turning a baseball game into a harsh "lesson").

Individuals with obsessive-compulsive personality disorder may be excessively conscientious, scrupulous, and inflexible about matters of morality, ethics, or values (Criterion 4). They may force themselves and others to follow rigid moral principles and very strict standards of performance. They may also be mercilessly self-critical about their own mistakes. Individuals with this disorder are rigidly deferential to authority and rules and insist on quite literal compliance, with no rule bending for extenuating circumstances. For example, the individual will not lend a quarter to a friend who needs one to make a telephone call because "neither a borrower nor a lender be" or because it would be "bad" for



the person's character. These qualities should not be accounted for by the individual's cultural or religious identification.

Individuals with this disorder may be unable to discard worn-out or worthless objects, even when they have no sentimental value (Criterion 5). Often these individuals will admit to being "pack rats." They regard discarding objects as wasteful because "you never know when you might need something" and will become upset if someone tries to get rid of the things they have saved. Their spouses or roommates may complain about the amount of space taken up by old parts, magazines, broken appliances, and so on.

Individuals with obsessive-compulsive personality disorder are reluctant to delegate tasks or to work with others (Criterion 6). They stubbornly and unreasonably insist that everything be done their way and that people conform to their way of doing things. They often give very detailed instructions about how things should be done (e.g., there is one and only one way to mow the lawn, wash the dishes, build a doghouse) and are surprised and irritated if others suggest creative alternatives. At other times they may reject offers of help even when behind schedule because they believe no one else can do it right.

Individuals with this disorder may be miserly and stingy and maintain a standard of living far below what they can afford, believing that spending must be tightly controlled to provide for future catastrophes (Criterion 7). Obsessive-compulsive personality disorder is characterized by rigidity and stubbornness (Criterion 8). Individuals with this disorder are so concerned about having things done the one "correct" way that they have trouble going along with anyone else's ideas. These individuals plan ahead in meticulous detail and are unwilling to consider changes. Totally wrapped up in their own perspective, they have difficulty acknowledging the viewpoints of others. Friends and colleagues may become frustrated by this constant rigidity. Even when individuals with obsessive-compulsive personality disorder recognize that it may be in their interest to compromise, they may stubbornly refuse to do so, arguing that it is "the principle of the thing."

## **Associated Features Supporting Diagnosis**

When rules and established procedures do not dictate the correct answer, decision making may become a time-consuming, often painful process. Individuals with obsessive-compulsive personality disorder may have such difficulty deciding which tasks take priority or what is the best way of doing some particular task that they may never get started on anything. They are prone to become upset or angry in situations in which they are not able to maintain control of their physical or interpersonal environment, although the anger is typically not expressed directly. For example, an individual may be angry when service in a restaurant is poor, but instead of complaining to the management, the individual ruminates about how much to leave as a tip. On other occasions, anger may be expressed with righteous indignation over a seemingly minor matter. Individuals with this disorder may be especially attentive to their relative status in dominance-submission relationships and may display excessive deference to an authority they respect and excessive resistance to authority they do not respect.

Individuals with this disorder usually express affection in a highly controlled or stilted fashion and may be very uncomfortable in the presence of others who are emotionally expressive. Their everyday relationships have a formal and serious quality, and they may be stiff in situations in which others would smile and be happy (e.g., greeting a lover at the airport). They carefully hold themselves back until they are sure that whatever they say will be perfect. They may be preoccupied with logic and intellect, and intolerant of affective behavior in others. They often have difficulty expressing tender feelings, rarely paying compliments. Individuals with this disorder may experience occupational difficulties and distress, particularly when confronted with new situations that demand flexibility and compromise.

Individuals with anxiety disorders, including generalized anxiety disorder, social anxiety disorder (social phobia), and specific phobias, and obsessive-compulsive disorder (OCD)

have an increased likelihood of having a personality disturbance that meets criteria for obsessive-compulsive personality disorder. Even so, it appears that the majority of individuals with OCD do not have a pattern of behavior that meets criteria for this personality disorder. Many of the features of obsessive-compulsive personality disorder overlap with “type A” personality characteristics (e.g., preoccupation with work, competitiveness, time urgency), and these features may be present in people at risk for myocardial infarction. There may be an association between obsessive-compulsive personality disorder and depressive and bipolar disorders and eating disorders.

## Prevalence

Obsessive-compulsive personality disorder is one of the most prevalent personality disorders in the general population, with estimated prevalence ranging from 2.1% to 7.9%.

## Culture-Related Diagnostic Issues

In assessing an individual for obsessive-compulsive personality disorder, the clinician should not include those behaviors that reflect habits, customs, or interpersonal styles that are culturally sanctioned by the individual’s reference group. Certain cultures place substantial emphasis on work and productivity; the resulting behaviors in members of those societies need not be considered indications of obsessive-compulsive personality disorder.

## Gender-Related Diagnostic Issues

In systematic studies, obsessive-compulsive personality disorder appears to be diagnosed about twice as often among males.

## Differential Diagnosis

**Obsessive-compulsive disorder.** Despite the similarity in names, OCD is usually easily distinguished from obsessive-compulsive personality disorder by the presence of true obsessions and compulsions in OCD. When criteria for both obsessive-compulsive personality disorder and OCD are met, both diagnoses should be recorded.

**Hoarding disorder.** A diagnosis of hoarding disorder should be considered especially when hoarding is extreme (e.g., accumulated stacks of worthless objects present a fire hazard and make it difficult for others to walk through the house). When criteria for both obsessive-compulsive personality disorder and hoarding disorder are met, both diagnoses should be recorded.

**Other personality disorders and personality traits.** Other personality disorders may be confused with obsessive-compulsive personality disorder because they have certain features in common. It is, therefore, important to distinguish among these disorders based on differences in their characteristic features. However, if an individual has personality features that meet criteria for one or more personality disorders in addition to obsessive-compulsive personality disorder, all can be diagnosed. Individuals with narcissistic personality disorder may also profess a commitment to perfectionism and believe that others cannot do things as well, but these individuals are more likely to believe that they have achieved perfection, whereas those with obsessive-compulsive personality disorder are usually self-critical. Individuals with narcissistic or antisocial personality disorder lack generosity but will indulge themselves, whereas those with obsessive-compulsive personality disorder adopt a miserly spending style toward both self and others. Both schizoid personality disorder and obsessive-compulsive personality disorder may be characterized by an apparent formality and social detachment. In obsessive-compulsive personality disorder, this stems from discomfort with emotions and excessive devotion to work, whereas in schizoid personality disorder there is a fundamental lack of capacity for intimacy.



Obsessive-compulsive personality traits in moderation may be especially adaptive, particularly in situations that reward high performance. Only when these traits are inflexible, maladaptive, and persisting and cause significant functional impairment or subjective distress do they constitute obsessive-compulsive personality disorder.

**Personality change due to another medical condition.** Obsessive-compulsive personality disorder must be distinguished from personality change due to another medical condition, in which the traits emerge attributable to the effects of another medical condition on the central nervous system.

**Substance use disorders.** Obsessive-compulsive personality disorder must also be distinguished from symptoms that may develop in association with persistent substance use.

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# Other Personality Disorders

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## Personality Change Due to Another Medical Condition

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Diagnostic Criteria	310.1 (F07.0)
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- A. A persistent personality disturbance that represents a change from the individual's previous characteristic personality pattern.  
**Note:** In children, the disturbance involves a marked deviation from normal development or a significant change in the child's usual behavior patterns, lasting at least 1 year.
- B. There is evidence from the history, physical examination, or laboratory findings that the disturbance is the direct pathophysiological consequence of another medical condition.
- C. The disturbance is not better explained by another mental disorder (including another mental disorder due to another medical condition).
- D. The disturbance does not occur exclusively during the course of a delirium.
- E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

*Specify whether:*

- Labile type:** If the predominant feature is affective lability.
- Disinhibited type:** If the predominant feature is poor impulse control as evidenced by sexual indiscretions, etc.
- Aggressive type:** If the predominant feature is aggressive behavior.
- Apathetic type:** If the predominant feature is marked apathy and indifference.
- Paranoid type:** If the predominant feature is suspiciousness or paranoid ideation.
- Other type:** If the presentation is not characterized by any of the above subtypes.
- Combined type:** If more than one feature predominates in the clinical picture.
- Unspecified type**

**Coding note:** Include the name of the other medical condition (e.g., 310.1 [F07.0] personality change due to temporal lobe epilepsy). The other medical condition should be coded and listed separately immediately before the personality disorder due to another medical condition (e.g., 345.40 [G40.209] temporal lobe epilepsy; 310.1 [F07.0] personality change due to temporal lobe epilepsy).

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# Glossary of Technical Terms

**affect** A pattern of observable behaviors that is the expression of a subjectively experienced feeling state (emotion). Examples of affect include sadness, elation, and anger. In contrast to *mood*, which refers to a pervasive and sustained emotional “climate,” *affect* refers to more fluctuating changes in emotional “weather.” What is considered the normal range of the expression of affect varies considerably, both within and among different cultures. Disturbances in affect include

**blunted** Significant reduction in the intensity of emotional expression.

**flat** Absence or near absence of any sign of affective expression.

**inappropriate** Discordance between affective expression and the content of speech or ideation.

**labile** Abnormal variability in affect with repeated, rapid, and abrupt shifts in affective expression.

**restricted or constricted** Mild reduction in the range and intensity of emotional expression.

**affective blunting** See AFFECT.

**agitation (psychomotor)** See PSYCHOMOTOR AGITATION.

**agnosia** Loss of ability to recognize objects, persons, sounds, shapes, or smells that occurs in the absence of either impairment of the specific sense or significant memory loss.

**alogia** An impoverishment in thinking that is inferred from observing speech and language behavior. There may be brief and concrete replies to questions and restriction in the amount of spontaneous speech (termed *poverty of speech*). Sometimes the speech is adequate in amount but conveys little information because it is overconcrete, overabstract, repetitive, or stereotyped (termed *poverty of content*).

**amnesia** An inability to recall important autobiographical information that is inconsistent with ordinary forgetting.

**anhedonia** Lack of enjoyment from, engagement in, or energy for life’s experiences; deficits in the capacity to feel pleasure and take interest in things. Anhedonia is a facet of the broad personality trait domain DETACHMENT.

**anosognosia** A condition in which a person with an illness seems unaware of the existence of his or her illness.

**antagonism** Behaviors that put an individual at odds with other people, such as an exaggerated sense of self-importance with a concomitant expectation of special treatment, as well as a callous antipathy toward others, encompassing both unawareness of others’ needs and feelings, and a readiness to use others in the service of self-enhancement. Antagonism is one of the five broad PERSONALITY TRAIT DOMAINS defined in Section III “Alternative DSM-5 Model for Personality Disorders.”

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SMALL CAPS indicate term found elsewhere in this glossary. Glossary definitions were informed by DSM-5 Work Groups, publicly available Internet sources, and previously published glossaries for mental disorders (World Health Organization and American Psychiatric Association).

- antidepressant discontinuation syndrome** A set of symptoms that can occur after abrupt cessation, or marked reduction in dose, of an antidepressant medication that had been taken continuously for at least 1 month.
- anxiety** The apprehensive anticipation of future danger or misfortune accompanied by a feeling of worry, distress, and/or somatic symptoms of tension. The focus of anticipated danger may be internal or external.
- anxiousness** Feelings of nervousness or tenseness in reaction to diverse situations; frequent worry about the negative effects of past unpleasant experiences and future negative possibilities; feeling fearful and apprehensive about uncertainty; expecting the worst to happen. Anxiousness is a facet of the broad personality trait domain NEGATIVE AFFECTIVITY.
- arousal** The physiological and psychological state of being awake or reactive to stimuli.
- asociality** A reduced initiative for interacting with other people.
- attention** The ability to focus in a sustained manner on a particular stimulus or activity. A disturbance in attention may be manifested by easy DISTRACTIBILITY or difficulty in finishing tasks or in concentrating on work.
- attention seeking** Engaging in behavior designed to attract notice and to make oneself the focus of others' attention and admiration. Attention seeking is a facet of the broad personality trait domain ANTAGONISM.
- autogynephilia** Sexual arousal of a natal male associated with the idea or image of being a woman.
- avoidance** The act of keeping away from stress-related circumstances; a tendency to circumvent cues, activities, and situations that remind the individual of a stressful event experienced.
- avolition** An inability to initiate and persist in goal-directed activities. When severe enough to be considered pathological, avolition is pervasive and prevents the person from completing many different types of activities (e.g., work, intellectual pursuits, self-care).
- bereavement** The state of having lost through death someone with whom one has had a close relationship. This state includes a range of grief and mourning responses.
- biological rhythms** See CIRCADIAN RHYTHMS.
- callousness** Lack of concern for the feelings or problems of others; lack of guilt or remorse about the negative or harmful effects of one's actions on others. Callousness is a facet of the broad personality trait domain ANTAGONISM.
- cataplexy** Passive induction of a posture held against gravity. Compare with WAXY FLEXIBILITY.
- cataplexy** Episodes of sudden bilateral loss of muscle tone resulting in the individual collapsing, often occurring in association with intense emotions such as laughter, anger, fear, or surprise.
- circadian rhythms** Cyclical variations in physiological and biochemical function, level of sleep-wake activity, and emotional state. Circadian rhythms have a cycle of about 24 hours, *ultradian* rhythms have a cycle that is shorter than 1 day, and *infradian* rhythms have a cycle that may last weeks or months.
- cognitive and perceptual dysregulation** Odd or unusual thought processes and experiences, including DEPERSONALIZATION, DEREALIZATION, and DISSOCIATION; mixed sleep-wake state experiences; and thought-control experiences. Cognitive and perceptual dysregulation is a facet of the broad personality trait domain PSYCHOTICISM.
- coma** State of complete loss of consciousness.

**compulsion** Repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the individual feels driven to perform in response to an obsession, or according to rules that must be applied rigidly. The behaviors or mental acts are aimed at preventing or reducing anxiety or distress, or preventing some dreaded event or situation; however, these behaviors or mental acts are not connected in a realistic way with what they are designed to neutralize or prevent or are clearly excessive.

**conversion symptom** A loss of, or alteration in, voluntary motor or sensory functioning, with or without apparent impairment of consciousness. The symptom is not fully explained by a neurological or another medical condition or the direct effects of a substance and is not intentionally produced or feigned.

**deceitfulness** Dishonesty and fraudulence; misrepresentation of self; embellishment or fabrication when relating events. Deceitfulness is a facet of the broad personality trait domain ANTAGONISM.

**defense mechanism** Mechanisms that mediate the individual's reaction to emotional conflicts and to external stressors. Some defense mechanisms (e.g., projection, splitting, acting out) are almost invariably maladaptive. Others (e.g., suppression, denial) may be either maladaptive or adaptive, depending on their severity, their inflexibility, and the context in which they occur.

**delusion** A false belief based on incorrect inference about external reality that is firmly held despite what almost everyone else believes and despite what constitutes incontrovertible and obvious proof or evidence to the contrary. The belief is not ordinarily accepted by other members of the person's culture or subculture (i.e., it is not an article of religious faith). When a false belief involves a value judgment, it is regarded as a delusion only when the judgment is so extreme as to defy credibility. Delusional conviction can sometimes be inferred from an overvalued idea (in which case the individual has an unreasonable belief or idea but does not hold it as firmly as is the case with a delusion). Delusions are subdivided according to their content. Common types are listed below:

**bizarre** A delusion that involves a phenomenon that the person's culture would regard as physically impossible.

**delusional jealousy** A delusion that one's sexual partner is unfaithful.

**erotomantic** A delusion that another person, usually of higher status, is in love with the individual.

**grandiose** A delusion of inflated worth, power, knowledge, identity, or special relationship to a deity or famous person.

**mixed type** Delusions of more than one type (e.g., EROTOMANIC, GRANDIOSE, PERSECUTORY, SOMATIC) in which no one theme predominates.

**mood-congruent** See MOOD-CONGRUENT PSYCHOTIC FEATURES.

**mood-incongruent** See MOOD-INCONGRUENT PSYCHOTIC FEATURES.

**of being controlled** A delusion in which feelings, impulses, thoughts, or actions are experienced as being under the control of some external force rather than being under one's own control.

**of reference** A delusion in which events, objects, or other persons in one's immediate environment are seen as having a particular and unusual significance. These delusions are usually of a negative or pejorative nature but also may be grandiose in content. A delusion of reference differs from an *idea of reference*, in which the false belief is not as firmly held nor as fully organized into a true belief.

**persecutory** A delusion in which the central theme is that one (or someone to whom one is close) is being attacked, harassed, cheated, persecuted, or conspired against.

**somatic** A delusion whose main content pertains to the appearance or functioning of one's body.

**thought broadcasting** A delusion that one's thoughts are being broadcast out loud so that they can be perceived by others.

**thought insertion** A delusion that certain of one's thoughts are not one's own, but rather are inserted into one's mind.

**depersonalization** The experience of feeling detached from, and as if one is an outside observer of, one's mental processes, body, or actions (e.g., feeling like one is in a dream; a sense of unreality of self, perceptual alterations; emotional and/or physical numbing; temporal distortions; sense of unreality).

**depressivity** Feelings of being intensely sad, miserable, and/or hopeless. Some patients describe an absence of feelings and/or dysphoria; difficulty recovering from such moods; pessimism about the future; pervasive shame and/or guilt; feelings of inferior self-worth; and thoughts of suicide and suicidal behavior. Depressivity is a facet of the broad personality trait domain DETACHMENT.

**derealization** The experience of feeling detached from, and as if one is an outside observer of, one's surroundings (e.g., individuals or objects are experienced as unreal, dreamlike, foggy, lifeless, or visually distorted).

**detachment** Avoidance of socioemotional experience, including both WITHDRAWAL from interpersonal interactions (ranging from casual, daily interactions to friendships and intimate relationships [i.e., INTIMACY AVOIDANCE]) and RESTRICTED AFFECTIVITY, particularly limited hedonic capacity. Detachment is one of the five pathological PERSONALITY TRAIT DOMAINS defined in Section III "Alternative DSM-5 Model for Personality Disorders."

**disinhibition** Orientation toward immediate gratification, leading to impulsive behavior driven by current thoughts, feelings, and external stimuli, without regard for past learning or consideration of future consequences. RIGID PERFECTIONISM, the opposite pole of this domain, reflects excessive constraint of impulses, risk avoidance, hyper-responsibility, hyperperfectionism, and rigid, rule-governed behavior. Disinhibition is one of the five pathological PERSONALITY TRAIT DOMAINS defined in Section III "Alternative DSM-5 Model for Personality Disorders."

**disorder of sex development** Condition of significant inborn somatic deviations of the reproductive tract from the norm and/or of discrepancies among the biological indicators of male and female.

**disorientation** Confusion about the time of day, date, or season (time); where one is (place); or who one is (person).

**dissociation** The splitting off of clusters of mental contents from conscious awareness. Dissociation is a mechanism central to dissociative disorders. The term is also used to describe the separation of an idea from its emotional significance and affect, as seen in the inappropriate affect in schizophrenia. Often a result of psychic trauma, dissociation may allow the individual to maintain allegiance to two contradictory truths while remaining unconscious of the contradiction. An extreme manifestation of dissociation is dissociative identity disorder, in which a person may exhibit several independent personalities, each unaware of the others.

**distractibility** Difficulty concentrating and focusing on tasks; attention is easily diverted by extraneous stimuli; difficulty maintaining goal-focused behavior, including both planning and completing tasks. Distractibility is a facet of the broad personality trait domain DISINHIBITION.

**dysarthria** A disorder of speech sound production due to structural or motor impairment affecting the articulatory apparatus. Such disorders include cleft palate, muscle

disorders, cranial nerve disorders, and cerebral palsy affecting bulbar structures (i.e., lower and upper motor neuron disorders).

**dyskinesia** Distortion of voluntary movements with involuntary muscle activity.

**dysphoria (dysphoric mood)** A condition in which a person experiences intense feelings of depression, discontent, and in some cases indifference to the world around them.

**dyssomnias** Primary disorders of sleep or wakefulness characterized by INSOMNIA or HYPERSOMNIA as the major presenting symptom. Dyssomnias are disorders of the amount, quality, or timing of sleep. Compare with PARASOMNIAS.

**dysthymia** Presence, while depressed, of two or more of the following: 1) poor appetite or overeating, 2) insomnia or hypersomnia, 3) low energy or fatigue, 4) low self-esteem, 5) poor concentration or difficulty making decisions, or 6) feelings of hopelessness.

**dystonia** Disordered tonicity of muscles.

**eccentricity** Odd, unusual, or bizarre behavior, appearance, and/or speech having strange and unpredictable thoughts; saying unusual or inappropriate things. Eccentricity is a facet of the broad personality trait domain PSYCHOTICISM.

**echolalia** The pathological, parrotlike, and apparently senseless repetition (echoing) of a word or phrase just spoken by another person.

**echopraxia** Mimicking the movements of another.

**emotional lability** Instability of emotional experiences and mood; emotions that are easily aroused, intense, and/or out of proportion to events and circumstances. Emotional lability is a facet of the broad personality trait domain NEGATIVE AFFECTIVITY.

**empathy** Comprehension and appreciation of others' experiences and motivations; tolerance of differing perspectives; understanding the effects of own behavior on others.

**episode (episodic)** A specified duration of time during which the patient has developed or experienced symptoms that meet the diagnostic criteria for a given mental disorder. Depending on the type of mental disorder, *episode* may denote a certain number of symptoms or a specified severity or frequency of symptoms. Episodes may be further differentiated as a single (first) episode or a recurrence or relapse of multiple episodes if appropriate.

**euphoria** A mental and emotional condition in which a person experiences intense feelings of well-being, elation, happiness, excitement, and joy.

**fatigability** Tendency to become easily fatigued. *See also* FATIGUE.

**fatigue** A state (also called exhaustion, tiredness, lethargy, languidness, languor, lassitude, and listlessness) usually associated with a weakening or depletion of one's physical and/or mental resources, ranging from a general state of lethargy to a specific, work-induced burning sensation within one's muscles. Physical fatigue leads to an inability to continue functioning at one's normal level of activity. Although widespread in everyday life, this state usually becomes particularly noticeable during heavy exercise. Mental fatigue, by contrast, most often manifests as SOMNOLENCE (sleepiness).

**fear** An emotional response to perceived imminent threat or danger associated with urges to flee or fight.

**flashback** A dissociative state during which aspects of a traumatic event are reexperienced as though they were occurring at that moment.

**flight of ideas** A nearly continuous flow of accelerated speech with abrupt changes from topic to topic that are usually based on understandable associations, distracting stimuli, or plays on words. When the condition is severe, speech may be disorganized and incoherent.

**gender** The public (and usually legally recognized) lived role as boy or girl, man or woman. Biological factors are seen as contributing in interaction with social and psychological factors to gender development.

**gender assignment** The initial assignment as male or female, which usually occurs at birth and is subsequently referred to as the "natal gender."

**gender dysphoria** Distress that accompanies the incongruence between one's experienced and expressed gender and one's assigned or natal gender.

**gender experience** The unique and personal ways in which individuals experience their gender in the context of the gender roles provided by their societies.

**gender expression** The specific ways in which individuals enact gender roles provided in their societies.

**gender identity** A category of social identity that refers to an individual's identification as male, female or, occasionally, some category other than male or female.

**gender reassignment** A change of gender that can be either medical (hormones, surgery) or legal (government recognition), or both. In case of medical interventions, often referred to as *sex reassignment*.

**geometric hallucination** See HALLUCINATION.

**grandiosity** Believing that one is superior to others and deserves special treatment; self-centeredness; feelings of entitlement; condescension toward others. Grandiosity is a facet of the broad personality trait domain ANTAGONISM.

**grimace (grimacing)** Odd and inappropriate facial expressions unrelated to situation (as seen in individuals with CATATONIA).

**hallucination** A perception-like experience with the clarity and impact of a true perception but without the external stimulation of the relevant sensory organ. Hallucinations should be distinguished from ILLUSIONS, in which an actual external stimulus is misperceived or misinterpreted. The person may or may not have insight into the non-veridical nature of the hallucination. One hallucinating person may recognize the false sensory experience, whereas another may be convinced that the experience is grounded in reality. The term *hallucination* is not ordinarily applied to the false perceptions that occur during dreaming, while falling asleep (*hypnagogic*), or upon awakening (*hypnopompic*). Transient hallucinatory experiences may occur without a mental disorder.

**auditory** A hallucination involving the perception of sound, most commonly of voice.

**geometric** Visual hallucinations involving geometric shapes such as tunnels and funnels, spirals, lattices, or cobwebs.

**gustatory** A hallucination involving the perception of taste (usually unpleasant).

**mood-congruent** See MOOD-CONGRUENT PSYCHOTIC FEATURES.

**mood-incongruent** See MOOD-INCONGRUENT PSYCHOTIC FEATURES.

**olfactory** A hallucination involving the perception of odor, such as of burning rubber or decaying fish.

**somatic** A hallucination involving the perception of physical experience localized within the body (e.g., a feeling of electricity). A somatic hallucination is to be distinguished from physical sensations arising from an as-yet-undiagnosed general medical condition, from hypochondriacal preoccupation with normal physical sensations, or from a tactile hallucination.

**tactile** A hallucination involving the perception of being touched or of something being under one's skin. The most common tactile hallucinations are the sensation

of electric shocks and formication (the sensation of something creeping or crawling on or under the skin).

**visual** A hallucination involving sight, which may consist of formed images, such as of people, or of unformed images, such as flashes of light. Visual hallucinations should be distinguished from ILLUSIONS, which are misperceptions of real external stimuli.

**hostility** Persistent or frequent angry feelings; anger or irritability in response to minor slights and insults; mean, nasty, or vengeful behavior. Hostility is a facet of the broad personality trait domain ANTAGONISM.

**hyperacusis** Increased auditory perception.

**hyperorality** A condition in which inappropriate objects are placed in the mouth.

**hypersexuality** A stronger than usual urge to have sexual activity.

**hypersomnia** Excessive sleepiness, as evidenced by prolonged nocturnal sleep, difficulty maintaining an alert awake state during the day, or undesired daytime sleep episodes. See also SOMNOLENCE.

**hypervigilance** An enhanced state of sensory sensitivity accompanied by an exaggerated intensity of behaviors whose purpose is to detect threats. Hypervigilance is also accompanied by a state of increased anxiety which can cause exhaustion. Other symptoms include abnormally increased arousal, a high responsiveness to stimuli, and a continual scanning of the environment for threats. In hypervigilance, there is a perpetual scanning of the environment to search for sights, sounds, people, behaviors, smells, or anything else that is reminiscent of threat or trauma. The individual is placed on high alert in order to be certain danger is not near. Hypervigilance can lead to a variety of obsessive behavior patterns, as well as producing difficulties with social interaction and relationships.

**hypomania** An abnormality of mood resembling mania but of lesser intensity. *See also* MANIA.

**hypopnea** Episodes of overly shallow breathing or an abnormally low respiratory rate.

**ideas of reference** The feeling that causal incidents and external events have a particular and unusual meaning that is specific to the person. An idea of reference is to be distinguished from a DELUSION OF REFERENCE, in which there is a belief that is held with delusional conviction.

**identity** Experience of oneself as unique, with clear boundaries between self and others; stability of self-esteem and accuracy of self-appraisal; capacity for, and ability to regulate, a range of emotional experience.

**illusion** A misperception or misinterpretation of a real external stimulus, such as hearing the rustling of leaves as the sound of voices. *See also* HALLUCINATION.

**impulsivity** Acting on the spur of the moment in response to immediate stimuli; acting on a momentary basis without a plan or consideration of outcomes; difficulty establishing and following plans; a sense of urgency and self-harming behavior under emotional distress. Impulsivity is a facet of the broad personality trait domain DISINHIBITION.

**incoherence** Speech or thinking that is essentially incomprehensible to others because word or phrases are joined together without a logical or meaningful connection. This disturbance occurs *within* clauses, in contrast to derailment, in which the disturbance is *between* clauses. This has sometimes been referred to a "word salad" to convey the degree of linguistic disorganization. Mildly ungrammatical constructions or idiomatic usages characteristic of a particular regional or cultural backgrounds, lack of education, or low intelligence should not be considered incoherence. The term is generally not applied when there is evidence that the disturbance in speech is due to an aphasia.

**insomnia** A subjective complaint of difficulty falling or staying asleep or poor sleep quality.



**intersex condition** A condition in which individuals have conflicting or ambiguous biological indicators of sex.

**intimacy** Depth and duration of connection with others; desire and capacity for closeness; mutuality of regard reflected in interpersonal behavior.

**intimacy avoidance** Avoidance of close or romantic relationships, interpersonal attachments, and intimate sexual relationships. Intimacy avoidance is a facet of the broad personality trait domain DETACHMENT.

**irresponsibility** Disregard for—and failure to honor—financial and other obligations or commitments; lack of respect for—and lack of follow-through on—agreements and promises; carelessness with others' property. Irresponsibility is a facet of the broad personality trait domain DISINHIBITION.

**language pragmatics** The understanding and use of language in a given context. For example, the warning "Watch your hands" when issued to a child who is dirty is intended not only to prompt the child to look at his or her hands but also to communicate the admonition "Don't get anything dirty."

**lethargy** A state of decreased mental activity, characterized by sluggishness, drowsiness, inactivity, and reduced alertness.

**macropsia** The visual perception that objects are larger than they actually are. Compare with MICROPSIA.

**magical thinking** The erroneous belief that one's thoughts, words, or actions will cause or prevent a specific outcome in some way that defies commonly understood laws of cause and effect. Magical thinking may be a part of normal child development.

**mania** A mental state of elevated, expansive, or irritable mood and persistently increased level of activity or energy. *See also* HYPOMANIA.

**manipulativeness** Use of subterfuge to influence or control others; use of seduction, charm, glibness, or ingratiation to achieve one's ends. Manipulativeness is a facet of the broad personality trait domain ANTAGONISM.

**mannerism** A peculiar and characteristic individual style of movement, action, thought, or speech.

**melancholia (melancholic)** A mental state characterized by very severe depression.

**micropsia** The visual perception that objects are smaller than they actually are. Compare with MACROPSIA.

**mixed symptoms** The specifier "with mixed features" is applied to mood episodes during which subthreshold symptoms from the opposing pole are present. Whereas these concurrent "mixed" symptoms are relatively simultaneous, they may also occur closely juxtaposed in time as a waxing and waning of individual symptoms of the opposite pole (i.e., depressive symptoms during hypomanic or manic episodes, and vice versa).

**mood** A pervasive and sustained emotion that colors the perception of the world. Common examples of mood include depression, elation, anger, and anxiety. In contrast to *affect*, which refers to more fluctuating changes in emotional "weather," mood refers to a pervasive and sustained emotional "climate." Types of mood include

**dysphoric** An unpleasant mood, such as sadness, anxiety, or irritability.

**elevated** An exaggerated feeling of well-being, or euphoria or elation. A person with elevated mood may describe feeling "high," "ecstatic," "on top of the world," or "up in the clouds."

**euthymic** Mood in the "normal" range, which implies the absence of depressed or elevated mood.

**expansive** Lack of restraint in expressing one's feelings, frequently with an overvaluation of one's significance or importance.

**irritable** Easily annoyed and provoked to anger.

**mood-congruent psychotic features** Delusions or hallucinations whose content is entirely consistent with the typical themes of a depressed or manic mood. If the mood is depressed, the content of the delusions or hallucinations would involve themes of personal inadequacy, guilt, disease, death, nihilism, or deserved punishment. The content of the delusion may include themes of persecution if these are based on self-derogatory concepts such as deserved punishment. If the mood is manic, the content of the delusions or hallucinations would involve themes of inflated worth, power, knowledge, or identity, or a special relationship to a deity or a famous person. The content of the delusion may include themes of persecution if these are based on concepts such as inflated worth or deserved punishment.

**mood-incongruent psychotic features** Delusions or hallucinations whose content is not consistent with the typical themes of a depressed or manic mood. In the case of depression, the delusions or hallucinations would not involve themes of personal inadequacy, guilt, disease, death, nihilism, or deserved punishment. In the case of mania, the delusions or hallucinations would not involve themes of inflated worth, power, knowledge, or identity, or a special relationship to a deity or a famous person.

**multiple sleep latency test** Polysomnographic assessment of the sleep-onset period, with several short sleep-wake cycles assessed during a single session. The test repeatedly measures the time to daytime sleep onset ("sleep latency") and occurrence of and time to onset of the rapid eye movement sleep phase.

**mutism** No, or very little, verbal response (in the absence of known aphasia).

**narcolepsy** Sleep disorder characterized by periods of extreme drowsiness and frequent daytime lapses into sleep (sleep attacks). These must have been occurring at least three times per week over the last 3 months (in the absence of treatment).

**negative affectivity** Frequent and intense experiences of high levels of a wide range of negative emotions (e.g., anxiety, depression, guilt/shame, worry, anger), and their behavioral (e.g., self-harm) and interpersonal (e.g., dependency) manifestations. Negative Affectivity is one of the five pathological PERSONALITY TRAIT DOMAINS defined in Section III "Alternative DSM-5 Model for Personality Disorders."

**negativism** Opposition to suggestion or advice; behavior opposite to that appropriate to a specific situation or against the wishes of others, including direct resistance to efforts to be moved.

**night eating syndrome** Recurrent episodes of night eating, as manifested by eating after awakening from sleep or excessive food consumption after the evening meal. There is awareness and recall of the eating. The night eating is not better accounted for by external influences such as changes in the individual's sleep-wake cycle or by local social norms.

**nightmare disorder** Repeated occurrences of extended, extremely dysphoric, and well-remembered dreams that usually involve efforts to avoid threats to survival, security or physical integrity and that generally occur during the second half of the major sleep episode. On awakening from the dysphoric dreams, the individual rapidly becomes oriented and alert.

**nonsubstance addiction(s)** Behavioral disorder (also called *behavioral addiction*) not related to any substance of abuse that shares some features with substance-induced addiction.

**obsession** Recurrent and persistent thoughts, urges, or images that are experienced, at some time during the disturbance, as intrusive and unwanted and that in most individuals cause marked anxiety or distress. The individual attempts to ignore or suppress such thoughts, urges, or images, or to neutralize them with some other thought or action (i.e., by performing a compulsion).

**overeating** Eating too much food too quickly.

**overvalued idea** An unreasonable and sustained belief that is maintained with less than delusional intensity (i.e., the person is able to acknowledge the possibility that the belief may not be true). The belief is not one that is ordinarily accepted by other members of the person's culture or subculture.

**panic attacks** Discrete periods of sudden onset of intense fear or terror, often associated with feelings of impending doom. During these attacks there are symptoms such as shortness of breath or smothering sensations; palpitations, pounding heart, or accelerated heart rate; chest pain or discomfort; choking; and fear of going crazy or losing control. Panic attacks may be unexpected, in which the onset of the attack is not associated with an obvious trigger and instead occurs "out of the blue," or expected, in which the panic attack is associated with an obvious trigger, either internal or external.

**paranoid ideation** Ideation, of less than delusional proportions, involving suspiciousness or the belief that one is being harassed, persecuted, or unfairly treated.

**parasomnias** Disorders of sleep involving abnormal behaviors or physiological events occurring during sleep or sleep-wake transitions. Compare with DYSSOMNIAS.

**perseveration** Persistence at tasks or in particular way of doing things long after the behavior has ceased to be functional or effective; continuance of the same behavior despite repeated failures or clear reasons for stopping. Perseveration is a facet of the broad personality trait domain NEGATIVE AFFECTIVITY.

**personality** Enduring patterns of perceiving, relating to, and thinking about the environment and oneself. PERSONALITY TRAITS are prominent aspects of personality that are exhibited in relatively consistent ways across time and across situations. Personality traits influence self and interpersonal functioning. Depending on their severity, impairments in personality functioning and personality trait expression may reflect the presence of a personality disorder.

**personality disorder—trait specified** In Section III "Alternative DSM-5 Model for Personality Disorders," a proposed diagnostic category for use when a personality disorder is considered present but the criteria for a specific disorder are not met. Personality disorder—trait specified (PD-TS) is defined by significant impairment in personality functioning, as measured by the Level of Personality Functioning Scale and one or more pathological PERSONALITY TRAIT DOMAINS or PERSONALITY TRAIT FACETS. PD-TS is proposed in DSM-5 Section III for further study as a possible future replacement for other specified personality disorder and unspecified personality disorder.

**personality functioning** Cognitive models of self and others that shape patterns of emotional and affiliative engagement.

**personality trait** A tendency to behave, feel, perceive, and think in relatively consistent ways across time and across situations in which the trait may be manifest.

**personality trait facets** Specific personality components that make up the five broad personality trait domains in the dimensional taxonomy of Section III "Alternative DSM-5 Model for Personality Disorders." For example, the broad domain antagonism has the following component facets: MANIPULATIVENESS, DECEITFULNESS, GRANDIOSITY, ATTENTION SEEKING, CALLOUSNESS, and HOSTILITY.

**personality trait domains** In the dimensional taxonomy of Section III “Alternative DSM-5 Model for Personality Disorders,” personality traits are organized into five broad domains: NEGATIVE AFFECTIVITY, DETACHMENT, ANTAGONISM, DISINHIBITION, and PSYCHOTICISM. Within these five broad trait domains are 25 specific personality trait facets (e.g., IMPULSIVITY, RIGID PERFECTIONISM).

**phobia** A persistent fear of a specific object, activity, or situation (i.e., the phobic stimulus) out of proportion to the actual danger posed by the specific object or situation that results in a compelling desire to avoid it. If it cannot be avoided, the phobic stimulus is endured with marked distress.

**pica** Persistent eating of nonnutritive nonfood substances over a period of at least 1 month. The eating of nonnutritive nonfood substances is inappropriate to the developmental level of the individual (a minimum age of 2 years is suggested for diagnosis). The eating behavior is not part of a culturally supported or socially normative practice.

**polysomnography** Polysomnography (PSG), also known as a sleep study, is a multiparametric test used in the study of sleep and as a diagnostic tool in sleep medicine. The test result is called a *polysomnogram*, also abbreviated PSG. PSG monitors many body functions, including brain (electroencephalography), eye movements (electro-oculography), muscle activity or skeletal muscle activation (electromyography), and heart rhythm (electrocardiography).

**posturing** Spontaneous and active maintenance of a posture against gravity (as seen in CATATONIA). Abnormal posturing may also be a sign of certain injuries to the brain or spinal cord, including the following:

**decerebrate posture** The arms and legs are out straight and rigid, the toes point downward, and the head is arched backward.

**decorticate posture** The body is rigid, the arms are stiff and bent, the fists are tight, and the legs are straight out.

**opisthotonus** The back is rigid and arching, and the head is thrown backward.

An affected person may alternate between different postures as the condition changes.

**pressured speech** Speech that is increased in amount, accelerated, and difficult or impossible to interrupt. Usually it is also loud and emphatic. Frequently the person talks without any social stimulation and may continue to talk even though no one is listening.

**prodrome** An early or premonitory sign or symptom of a disorder.

**pseudocyesis** A false belief of being pregnant that is associated with objective signs and reported symptoms of pregnancy.

**psychological distress** A range of symptoms and experiences of a person’s internal life that are commonly held to be troubling, confusing, or out of the ordinary.

**psychometric measures** Standardized instruments such as scales, questionnaires, tests, and assessments that are designed to measure human knowledge, abilities, attitudes, or personality traits.

**psychomotor agitation** Excessive motor activity associated with a feeling of inner tension. The activity is usually nonproductive and repetitious and consists of behaviors such as pacing, fidgeting, wringing of the hands, pulling of clothes, and inability to sit still.

**psychomotor retardation** Visible generalized slowing of movements and speech.

**psychotic features** Features characterized by delusions, hallucinations, and formal thought disorder.

**psychoticism** Exhibiting a wide range of culturally incongruent odd, eccentric, or unusual behaviors and cognitions, including both process (e.g., perception, dissociation)

and content (e.g., beliefs). Psychoticism is one of the five broad PERSONALITY TRAIT DOMAINS defined in Section III “Alternative DSM-5 Model for Personality Disorders.”

**purging disorder** Eating disorder characterized by recurrent purging behavior to influence weight or shape, such as self-induced vomiting, misuse of laxatives, diuretics, or other medications, in the absence of binge eating.

**racing thoughts** A state in which the mind uncontrollably brings up random thoughts and memories and switches between them very quickly. Sometimes the thoughts are related, with one thought leading to another; other times they are completely random. A person experiencing an episode of racing thoughts has no control over them and is unable to focus on a single topic or to sleep.

**rapid cycling** Term referring to bipolar disorder characterized by the presence of at least four mood episodes in the previous 12 months that meet the criteria for a manic, hypomanic, or major depressive episode. Episodes are demarcated either by partial or full remissions of at least 2 months or by a switch to an episode of the opposite polarity (e.g., major depressive episode to manic episode). The rapid cycling specifier can be applied to bipolar I or bipolar II disorder.

**rapid eye movement (REM)** A behavioral sign of the phase of sleep during which the sleeper is likely to be experiencing dreamlike mental activity.

**repetitive speech** Morphologically heterogeneous iterations of speech.

**residual phase** Period after an episode of schizophrenia that has partly or completed remitted but in which some symptoms may remain, and symptoms such as listlessness, problems with concentrating, and withdrawal from social activities may predominate.

**restless legs syndrome** An urge to move the legs, usually accompanied or caused by uncomfortable and unpleasant sensations in the legs (for pediatric restless legs syndrome, the description of these symptoms should be in the child’s own words). The symptoms begin or worsen during periods of rest or inactivity. Symptoms are partially or totally relieved by movement. Symptoms are worse in the evening or at night than during the day or occur only in the night/evening.

**restricted affectivity** Little reaction to emotionally arousing situations; constricted emotional experience and expression; indifference and aloofness in normatively engaging situations. Restricted affectivity is a facet of the broad personality trait domain DETACHMENT.

**rigid perfectionism** Rigid insistence on everything being flawless, perfect, and without errors or faults, including one’s own and others’ performance; sacrificing of timeliness to ensure correctness in every detail; believing that there is only one right way to do things; difficulty changing ideas and/or viewpoint; preoccupation with details, organization, and order. Lack of rigid perfectionism is a facet of the broad personality trait domain DISINHIBITION.

**risk taking** Engagement in dangerous, risky, and potentially self-damaging activities, unnecessarily and without regard to consequences; lack of concern for one’s limitations and denial of the reality of personal danger; reckless pursuit of goals regardless of the level of risk involved. Risk taking is a facet of the broad personality trait domain DISINHIBITION.

**rumination (rumination disorders)** Repeated regurgitation of food over a period of at least 1 month. Regurgitated food may be re-chewed, re-swallowed, or spit out. In rumination disorders, there is no evidence that an associated gastrointestinal or another medical condition (e.g., gastroesophageal reflux) is sufficient to account for the repeated regurgitation.

**seasonal pattern** A pattern of the occurrence of a specific mental disorder in selected seasons of the year.

**self-directedness, self-direction** Pursuit of coherent and meaningful short-term and life goals; utilization of constructive and prosocial internal standards of behavior; ability to self-reflect productively.

**separation insecurity** Fears of being alone due to rejection by and/or separation from significant others, based in a lack of confidence in one's ability to care for oneself, both physically and emotionally. Separation insecurity is a facet of the broad personality trait domain NEGATIVE AFFECTIVITY.

**sex** Biological indication of male and female (understood in the context of reproductive capacity), such as sex chromosomes, gonads, sex hormones, and nonambiguous internal and external genitalia.

**sign** An objective manifestation of a pathological condition. Signs are observed by the examiner rather than reported by the affected individual. Compare with SYMPTOM.

**sleep-onset REM** Occurrence of the rapid eye movement (REM) phase of sleep within minutes after falling asleep. Usually assessed by a polysomnographic MULTIPLE SLEEP LATENCY TEST.

**sleep terrors** Recurrent episodes of abrupt terror arousals from sleep, usually occurring during the first third of the major sleep episode and beginning with a panicky scream. There is intense fear and signs of autonomic arousal, such as mydriasis, tachycardia, rapid breathing, and sweating, during each episode.

**sleepwalking** Repeated episodes of rising from bed during sleep and walking about, usually occurring during the first third of the major sleep episode. While sleepwalking, the person has a blank, staring face, is relatively unresponsive to the efforts of others to communicate with him or her, and can be awakened only with great difficulty.

**somnolence (or "drowsiness")** A state of near-sleep, a strong desire for sleep, or sleeping for unusually long periods. It has two distinct meanings, referring both to the usual state preceding falling asleep and to the chronic condition that involves being in that state independent of a circadian rhythm. Compare with HYPERSOMNIA.

**specific food cravings** Irresistible desire for special types of food.

**startle response (or "startle reaction")** An involuntary (reflexive) reaction to a sudden unexpected stimulus, such as a loud noise or sharp movement.

**stereotypies, stereotyped behaviors/movements** Repetitive, abnormally frequent, non-goal-directed movements, seemingly driven, and nonfunctional motor behavior (e.g., hand shaking or waving, body rocking, head banging, self-biting).

**stress** The pattern of specific and nonspecific responses a person makes to stimulus events that disturb his or her equilibrium and tax or exceed his or her ability to cope.

**stressor** Any emotional, physical, social, economic, or other factor that disrupts the normal physiological, cognitive, emotional, or behavioral balance of an individual.

**stressor, psychological** Any life event or life change that may be associated temporally (and perhaps causally) with the onset, occurrence, or exacerbation of a mental disorder.

**stupor** Lack of psychomotor activity, which may range from not actively relating to the environment to complete immobility.

**submissiveness** Adaptation of one's behavior to the actual or perceived interests and desires of others even when doing so is antithetical to one's own interests, needs, or desires. Submissiveness is a facet of the broad personality trait domain NEGATIVE AFFECTIVITY.

**subsyndromal** Below a specified level or threshold required to qualify for a particular condition. Subsyndromal conditions (*formes frustes*) are medical conditions that do not meet full criteria for a diagnosis—for example, because the symptoms are fewer or less severe than a defined syndrome—but that nevertheless can be identified and related to the “full-blown” syndrome.

**suicidal ideas (suicidal ideation)** Thoughts about self-harm, with deliberate consideration or planning of possible techniques of causing one’s own death.

**suicide** The act of intentionally causing one’s own death.

**suicide attempt** An attempt to end one’s own life, which may lead to one’s death.

**suspiciousness** Expectations of—and sensitivity to—signs of interpersonal ill intent or harm; doubts about loyalty and fidelity of others; feelings of being mistreated, used, and/or persecuted by others. Suspiciousness is a facet of the broad personality trait domain DETACHMENT.

**symptom** A subjective manifestation of a pathological condition. Symptoms are reported by the affected individual rather than observed by the examiner. Compare with SIGN.

**syndrome** A grouping of signs and symptoms, based on their frequent co-occurrence that may suggest a common underlying pathogenesis, course, familial pattern, or treatment selection.

**synesthesias** A condition in which stimulation of one sensory or cognitive pathway leads to automatic, involuntary experiences in a second sensory or cognitive pathway.

**temper outburst** An emotional outburst (also called a “tantrum”), usually associated with children or those in emotional distress, and typically characterized by stubbornness, crying, screaming, defiance, angry ranting, a resistance to attempts at pacification, and in some cases hitting. Physical control may be lost, the person may be unable to remain still, and even if the “goal” of the person is met, he or she may not be calmed.

**thought-action fusion** The tendency to treat thoughts and actions as equivalent.

**tic** An involuntary, sudden, rapid, recurrent, nonrhythmic motor movement or vocalization.

**tolerance** A situation that occurs with continued use of a drug in which an individual requires greater dosages to achieve the same effect.

**transgender** The broad spectrum of individuals who transiently or permanently identify with a gender different from their natal gender.

**transsexual** An individual who seeks, or has undergone, a social transition from male to female or female to male, which in many, but not all cases may also involve a somatic transition by cross-sex hormone treatment and genital surgery (“sex reassignment surgery”).

**traumatic stressor** Any event (or events) that may cause or threaten death, serious injury, or sexual violence to an individual, a close family member, or a close friend.

**unusual beliefs and experiences** Belief that one has unusual abilities, such as mind reading, telekinesis, or THOUGHT-ACTION FUSION; unusual experiences of reality, including hallucinatory experiences. In general, the unusual beliefs are not held at the same level of conviction as DELUSIONS. Unusual beliefs and experiences are a facet of the personality trait domain PSYCHOTICISM.

**waxy flexibility** Slight, even resistance to positioning by examiner. Compare with CAT-ALEPSY.

**withdrawal, social** Preference for being alone to being with others; reticence in social situations; AVOIDANCE of social contacts and activity; lack of initiation of social contact. Social withdrawal is a facet of the broad personality trait domain DETACHMENT.

**worry** Unpleasant or uncomfortable thoughts that cannot be consciously controlled by trying to turn the attention to other subjects. The worrying is often persistent, repetitive, and out of proportion to the topic worried about (it can even be about a triviality).